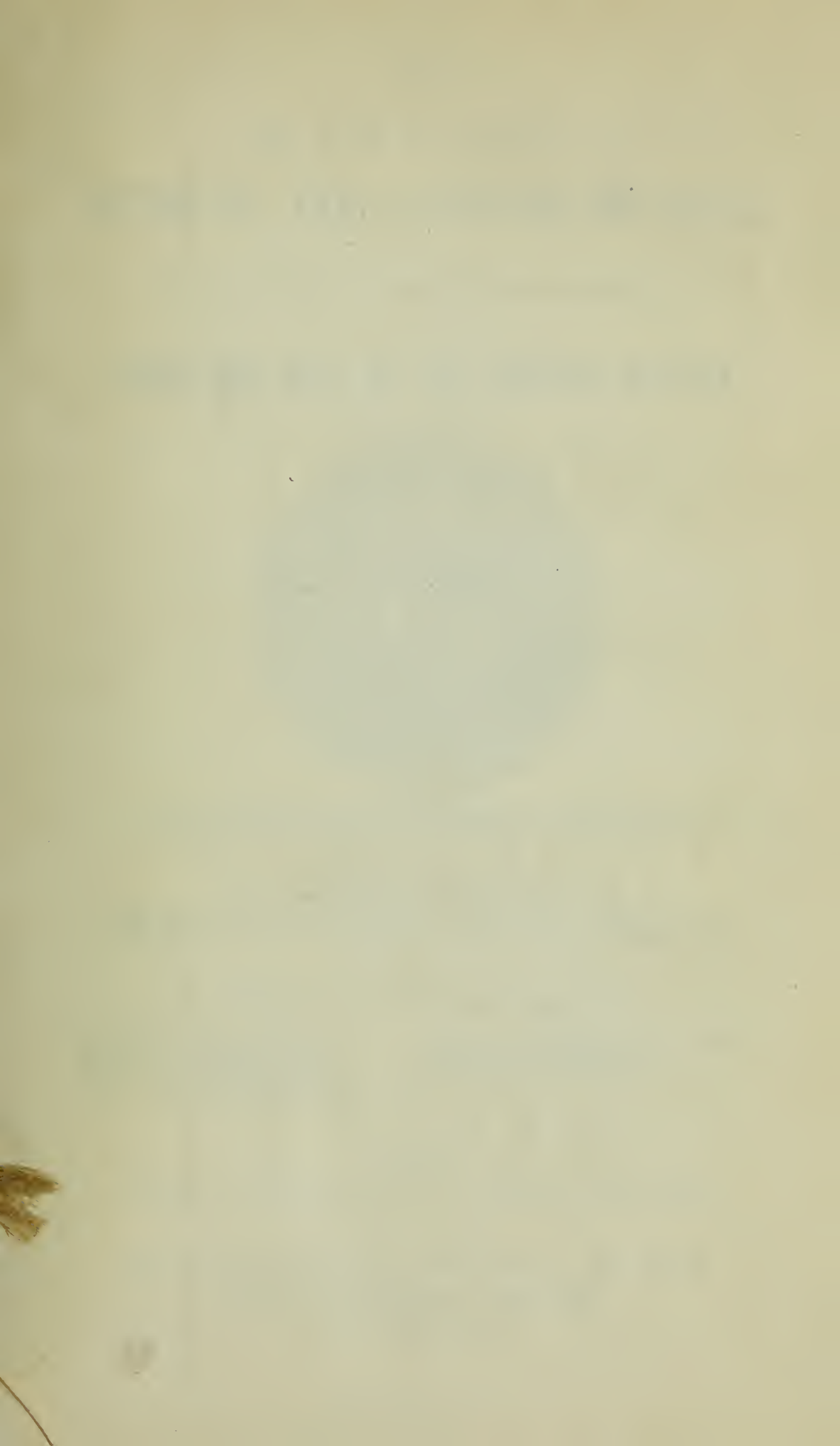
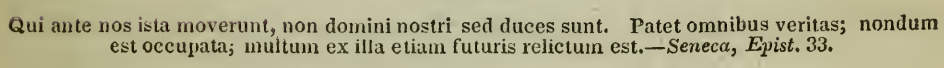


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ART. I.—*Case of Un-united Fracture of the Fore-arm, of four years' standing, successfully treated.* By CHAS. S. TRIPLER, M. D., Surgeon U. S. Army.

LIEUT. F., of the 5th Regiment of Infantry, 30 years of age, of a scrofulous habit, broke both bones of the left fore-arm, four years ago. Owing to some neglect, union was not effected at the time; and they remained until the 30th of January, 1842, un-united.

Upon examination it appeared, that the radius was broken within two inches of its humeral extremity, and the ulna at one-third of its length from the elbow. The radius was not much displaced, but there was a prominence at the fractured point, as if the superior portion were depressed and thrust under the lower portion. The fractured extremities of the ulna were displaced toward the ulnar edge and back of the radius, forming a large and salient angle at the point of meeting. By extension the bone could be brought nearly into its normal position and plane. The limb was useless except in lifting weights in the direction of its axis.

The moment the elbow joint was flexed, the hand became powerless. The fore-arm was shortened nearly three inches.

The false joint in the ulna admitting of the greater degree of motion, I thought it probable, that if I could effect an osseous union in *that* bone the use of the arm would be sufficiently restored for all ordinary purposes. With this view I determined to try pressure as recommended by Brodie, Amesbury and others.—I placed a flat, broad splint upon the palmar face of the fore-arm, and a firm oval pad over the fractured point of the bone. A roller was then nicely adjusted from the fingers to the elbow, over the pad, while extension of the limb was made by an assistant. Additional pressure was made upon the pad, by means of an iron band passing round the arm with a thumb-screw working through it. It required some further contrivance to adjust this band and screw, so as to bring the force in a direction perpendicular to the axis of the ulna.

The pain caused by this apparatus was excessive. The patient declared he could not bear it, and day after day he had it removed in my absence and then rather clumsily reapplied after he had got a little ease. Under these circumstances I could not expect to make a very straight bone, if union was effected at all; nevertheless, I persevered for eleven weeks and then had the satisfaction to find that a firm union had been accomplished in *that* bone.

It was now discovered that the mobility of the false joint in the radius was such as still to impede, in an important degree, the functions of the organ. The pronator and supinator muscles being inserted into that bone, rotation was of course very imperfect, and the flexibility of the fore-arm at the point of fracture of the radius would hinder the complete ossification of the ulna. It became necessary then by some means to endeavor to produce bony union in the radius. Pressure, I thought too tedious and uncertain, nor could I contrive any satisfactory mode of applying it to this bone, under the particular circumstances of the case. The same reasons forbade the use of the seton. I therefore, after consultation with my friend Dr. Pitcher, late of the Army, determined to expose the radius, and remove the ends of the bone at the point of fracture.

This operation I performed, with the assistance of Dr. Pitcher, on the 18th of April, by making an incision about four inches long, through the integuments and fascia over the supinator longus muscle, dissecting down to the bone carefully on the outer side of that muscle, and then removing the fractured extremities of the radius with the trephine.

The operation was rendered painful and tedious, by the difficulty experienced in detaching the pieces of the bone from the interosseous ligament, the wound being very deep and narrow.

The edges of the wound were brought together with adhesive straps, and the arm secured in pasteboard splints and a roller. The next day there was some excitement, and the arm above the elbow was somewhat red and tumified; on the 20th this inflammation was increased and had assumed distinctly, the form of phlegmonous erysipelas. The wound looked perfectly well. In a day or two the diffuse cellular inflammation suppurred, with the usual accompaniments, rigors, burning pains, &c., and was relieved by discharging its pus partly through the wound and partly through a counter opening above the elbow. After this the patient had two attacks of intermittent fever of the tertian type, both of them reproducing the swelling and suppuration of the skin and cellular tissue above the elbow, and retarding the cicatrization of the wound made in the operation. I was fearful these successive suppurations, by keeping the ends of the bones bathed in pus would prevent the deposit of osseous matter, and defeat the object of the operation. But by constant attention to the general health of the patient, on the 31st of May I had the satisfaction to find that a bony union of the radius was effected; on the 17th of June the external wound was completely cicatrized, and on the 21st the patient was reported for duty.

The arm is now about one inch shorter than the other. The radius is perfectly straight; the ulna is firmly united at a small angle; the motions of pronation and supination are performed very well and are daily improving.

REMARKS.—In cases of un-united fracture, three principal methods of procedure are recommended, and all upon high authority; the seton, excision of the fractured extremities of the bone, and forcible apposition maintained for a considerable length of time.

There can be no doubt of the success of each method under favorable circumstances; but when a fracture has remained so long un-united as the case reported, to which method should the surgeon resort?

In this case I tried two of them on two different bones; both succeeded. Excision was successful in spite of several untoward accidents in six weeks. Forcible apposition, without any other disturbing circumstance than the impatience of the patient, was also successful in *eleven* weeks, and was a much more painful operation than the former.

Without extending these remarks any further, I should then say, excision is decidedly preferable. It seems to me there can be no reasonable objection to it. After the operation, the surgeon has a favorable case of compound fracture to treat, without the bruising and laceration of the soft parts, attendant upon that form of injury when it is the result of accident.

The seton in this case would have been inapplicable, from the peculiar form of the fracture—I mean on Dr. Physick's plan.—Nor do I think Oppenheim's method would have been successful, from the great age of the fracture. The only cases I have heard of, treated on this plan, were but of six months' standing, or less.

ART. II.—*Nervous Irritations*. By WM. M. KEMP, M. D. of Baltimore.

(Continued from Vol. II. page 302.)

As to the pathology of many of the diseases, embraced in the neuroses of nosologists, we are to this day left without that certainty, which is most desirable and which guides us in our encounters with other, and perhaps more fatal, affections. The scalpel, in the hands of the wisest and most experienced, has often been profitless in the search for the essential nature of these disorders, and the most adroit anatomists have been compelled to lay it down, foiled and disappointed. But in the absence of

a satisfactory comprehension of what are, now, the mysteries of the nervous system, there are many facts which aid greatly in the adaptation of remedies to its diseased manifestations; and carefully ascertained facts, as indices, may point along the way to their ultimate unravelment.

The reciprocal influence existing between the great nervous centres and the terminal expansions of the nervous system in the different organs, is universally allowed and referred to, in the movements of certain diseases, as the cause; but it is not yet fully understood, how far the nervous tissues, constituting a component part of the organs, may be independent of the centres. These nervous expansions are formed contemporaneously with the organs into which they enter, and in their *formation* appear to be independent of their centres.

In considering the diseased conditions of the nervous system, embarrassments are met with at every step; the difficulties in the case often arising from the irrelevancy of the symptoms to many of the known morbid states of the system producing analogous appearances, and from the want of order and regularity in the diseased manifestations. The cerebral, spinal and sympathetic systems are the great producers and regulators of nervous phenomena; and although they appear to be independent of one another, when abstractly considered, yet there is a partial relationship existing among them and mutual influences felt by them. It was, for a long time, and is even yet, a controverted question, how these influences are conveyed. If, however, the researches of MAYER should be confirmed, by succeeding observers, then one of the gordian knots, which has so greatly embarrassed pathologists, will be beautifully opened. He declares that he has distinctly seen the sympathetic communicating by twigs, not only with the ganglion spinale of the spinal nerves, but that there are also several solitary filaments of the sympathetic, evidently continued with the filaments of one of the anterior spinal nerves, into the spinal marrow itself. He gives two drawings shewing this connection, one in the human subject, the other in a calf. *It is by the second lumbar nerve that this connection is established.* Many of the cases of paralysis of the extremities following abdominal diseases will,

without doubt, be rationally and correctly explained, with the assistance of this discovered spinal and sympathetic union.

Various forms of nervous diseases are met with in daily practice, occurring in every condition of constitutional habit and assuming every variety of morbid character; and often when in one class of patients the relation of diseased action to its morbid cause may be established and the judgment satisfied in relation to the facts bearing upon it, yet not unfrequently in another class of cases, the same anormal developements are exhibited, apparently wholly independent of the morbid impressions which were active in the first class. Often too in a prolonged case, the train of phenomena exhibited at one period, is sometimes succeeded at another, by actions and associations considerably altered and interrupted in their succession. Although there is usually not much difficulty in connecting the morbid developements depending upon an open, positive disease of the nervous centres with the true character of their anormal condition, yet cases are very frequently met with, offering many of the symptoms incident to the open form of central disease, which are so blended with appearances of other diseased actions and so varying in their order and combinations, that it is extremely difficult to recognize that dependence upon the familiar laws of diseased associations, which are wont to be applied in less complicated cases. Again, many of the symptoms marking the commoner forms of disease, are frequently found presenting a degree of great intensity, apparently depending upon severe structural lesion, yet disappearing in a manner and after a duration altogether inconsistent with those morbid changes, which are regarded as the essentials of active disease. Here amid the confusion and disorder, the physician frequently finds himself in a labyrinth without a clue. Applicable as these facts are to the tumultuous and severe exhibitions of disease, perplexity not unfrequently arises from the same cause, in the investigation of milder and more noiseless forms.

What is the essential condition producing these displays in the nervous extensions and tissues? By some it is attributed to an irritative or inflammatory action of the capillaries, ramifying upon the affected nerves; by others to "a complaint of the brain itself,

to which the disorder merely stands in the relation of effect;" by others to "irritation, or a subacute inflammatory state of the spinal marrow;" others are led to an opposite conviction of its nature; and others, drawing inferences from the phenomena of isomerism in inorganic bodies, think it not unlikely that there may be a change in the nervous substance, not depending upon the quantity of its organic molecules, but upon a new and different arrangement of these molecules.

Disposed to regard this affection as dynamical in its character, in reference to the nervous system itself, yet admitting that it may exist with an enfeebled state of the general system, a careful consideration of the various symptoms and a comparison with other forms of disease, have led to the belief that some, who have given their attention to it, have been too exclusive in their views.

The principal divisions of the great nervous system, which are continually reacting upon one another are the cerebral, spinal, and sympathetic centres, and the nervous expansions or tissues of the organs. Objection may be urged to the degree of independency which is here assigned to the "rete nervosum," as it might be styled; yet it is true, that in the varied powers of its different portions in perceiving and appreciating the presence and characters of external impressions, is discovered a degree of sensibility which is peculiar and not enjoyed alike by other portions. That the nervous rete of the skin is endowed with a higher degree of sensibility, than the trunks of nerves connecting it with the common centres, is plainly inferable from the galvanic experiments, performed upon the body of an executed criminal in Lancaster, Penn. (Vide *American Journal of Med. Sciences*, vol. 26.) In these experiments it was very apparent, that when the pole of the battery was passed over the skin and of course in connection with the nervous expansion of the skin, there was more perfect contraction of the respiratory and other muscles, than when the pole was applied to an exposed nerve. In the 3d vol. of Bell's *Eclectic Journal*, similar experiments, affording a like result, are detailed.

The uses and purposes of this nervous rete of the organs, may be more clearly expressed, by a passing reference to the vascular

system. In that system the heart occupies a central position to the two grand divisions of the circulatory apparatus, and to a greater or lesser degree is the source of motive power to its fluids ; but between the terminations of the arteries and the commencing radicles of the veins is a capillary system, partaking of *some* of the characters of the larger vessels, yet totally different in its functions and peculiar in its offices ; it constitutes a part of, and plays an important round in the circulation, but is singular in its organization and unique in its operations. It is capable of receiving impressions and producing results independently of the heart, yet causing its influence to be felt by the heart and in turn itself becoming influenced by the state of the heart. In this view, the arteries and veins are merely conduits, conveying the blood to and from these capillary vessels. It is by no means improbable, that the nervous organic expansions sustain a relation to the entire nervous system, analogous in kind to that of the capillary blood-tubes in the circulatory organs.

The microscopic examination into the structure of the nervous system by EHRENBURG, (the results of which were communicated in a paper read to the Academy of Sciences at Berlin in 1833, and republished in this country in Bell's *Eclectic Journal* in 1838,) has brought to light peculiarities in the structure of the brain and nervous system, which will modify in a great measure hitherto received physiological opinions, and if his discoveries are confirmed by other examiners, they will go a great way in confirming what has just been advanced. Although the temptation is great to introduce extracts from his paper at this place, space utterly forbids it. Thus, in few words, it has been attempted to convey the idea of the relations of the nervous tissues and the place they hold among the important organs of the body. The sensibility and functions of these expansions are susceptible of modifications and derangement, independent of any visible or appreciable lesion of the centres with which they correspond.

Sensation and motility sustain the same physiological relation to the nervous expansions, the spinal marrow and its prolongations, that the intellectual faculties do to the hemispheres of the brain, or the visceral actions to the ganglionic system.

That a cause capable of producing an exaltation of the functional performances of one of these, should, when located in either of the others, be productive of similar consequences in its movements, is at once plausible and undeniable. The functions of these organs are the conspicuous indices of their pathological states, and often reveal their condition with great truth. When the phenomena of meningitis or cerebritis are met with, they are regarded as symptoms of disease, and are referred to an irritation or inflammation of that portion presiding over and in health regulating these things. These diseases being seated in one division of the great nervous system, and in consequence of a dynamic condition manifesting an exaltation of function, furnish many reasons for believing that in the other, "similia" are produced "similibus." What is pain, as neuralgia for instance, but an exaltation of the function of one portion of the apparatus of sensation; or what is commotion in muscular movements, but an increased and morbid action of another portion of the same cerebro-spinal system? If the more frequent opportunities of autopsical investigations, have furnished the true pathological condition of the diseases within the cranium, is it at all unreasonable to attach a similar pathology to cases offering similar functional developments, because elsewhere, in the less fatal variety, post mortem examinations have failed, from their paucity, to demonstrate that condition? That in similar organs, the same causes will produce the same effects, is an axiom most clearly beyond controversy. That this law obtains in respect to other organs, whose productions are cognizable by the senses, will not be denied. Why then should similar displays in the nervous system alone, be exempted from the application of the same law? Why are not indications in this system of a like functional character with those of others, to be explained upon the same pathological principles? The effects of any given agent, will under the same circumstances be found to correspond, wherever that agent is brought into play. And by a converse rule, whenever any given condition of an organ of known character, is found to be the effect of an ascertained cause, and that condition in this organ, is always produced by this cause, then, the same condition in any

other organ, of similar character, may justly be determined to arise from the same cause. Then it may be fairly concluded that if a functional elevation of the cranial centre is dependent upon an irritation or dynamic cause, corresponding in intensity of symptoms with the degree of local action, a similar exaltation of function in the medulla or other active portions of the nervous system, would require the same pathological condition for its production; the different offices of the organs, being sufficient to explain the difference in character of the results.

The preceding observations lead to the following inferences: Ist. That the essential condition of the nervous apparatus, in the states under consideration, is dynamic or morbidly exalted. 2d. That this essential condition may be produced by the operation of causes immediately on the centres or on the tissues; and may be also induced by lesion of another organ, involving these portions secondarily.

The alledged effect of the depressing passions appears, at first sight, to oppose this view, but upon a deliberate consideration of the subject, the difficulty loses its force. It is by no means clear, that the really depressing passions have any tendency to the production of this state. Cases do occur in persons who may have been, recently, subjected to these depressing emotions; yet observation will sustain the assertion, that very few, if any cases occur under these circumstances, in which investigation will not discover some demonstration of this condition, pre-existent to and independent of, the influence referred to.

It may be further objected to this idea of the essential character of these affections, that, in those deep derangements, marking even the most exquisite forms of chlorosis and defective hæmatisis, well pronounced forms of nervous irritations are frequently encountered, and under such circumstances their removal is accomplished by means usually thought to be incompatible with a dynamic affection. Chlorotic and anæmic state of the system, offers exceptions to some leading general rules, yet by a careful consideration of their phenomena, valuable conclusions may be deduced in reference to these very rules. Chlorosis owes its very first step to a perpetuation of irritation or inflammation, ha-

passing for a time, and finally exhausting the power of those organs more immediately interested in its origin. Amenorrhœa and dysmenorrhœa arising from imprudence during the menstrual molimen or from other causes, and marked by evident symptoms of excitation of greater or less continuance, have, in their protracted stages, been accompanied by the best defined chlorosis. Beginning in the anormal condition of menstruation and throwing out every evidence of diseased excitation, this state soon involves the nervous system more nearly related to it, and by the repetition and continuance of this morbid excitement, those functional connections known to exist in the nervous system are awakened, and distant, but not disconnected, parts become involved in its round. By a general law it appears, that in proportion as the stamina of the system become enfeebled and the nutritive processes crippled or impaired, the nervous system rises in its scale of sensibility and becomes more alive to impressions of organic actions. If nervous irritations *sprung up* only when the chlorosis had arrived at an advanced degree, and were not the accompaniments of its early stages, difficulty in adopting these views might reasonably be apprehended. Moreover the connection of nervous irritations with these profound states of deranged nutrition, bears analogy to the developement of brain symptoms, in the acute stage of some clearly dynamic fevers, which continue with and become aggravated in their prolonged course. It is in these conditions that "stimulants become antiphlogistics," and medicines, destructive in their effects, in the early period, become salutary and efficacious in the protracted stages.

The chylopoietic organs frequently betray embarrassment, and diseased manifestations are restricted for a time to them; but if they are not somewhat promptly relieved the external systems partake of their excitements and the display of nervous irritations becomes a consequence. The pervading influence of the stomach, liver, and associated organs, upon the animal economy, in health as well as in disease, has for a very long time been recognized and demonstrated. Convulsions and coma, so often produced by offending ingesta, may be adduced as instances in proof. Although convulsions are to be regarded as depending

immediately upon spinal or cerebral irritation and by no means necessary symptoms of gastro-intestinal disturbance, yet in the cases here specified it is evident that the cerebro-spinal irritation is derived originally from the gastro-enteric embarrassment.

Much has been lately written upon spinal irritation and the great relief afforded by remedial measures addressed upon that principle, and in many instances most demonstrative proof has been afforded of the important relations thus existing to many diversified forms of disease. Before the general belief in the reflex actions of the nervous system, as taught particularly by *Hall* and *Muller*, astute physicians had caught a glimpse of this truth and began to speak of "the dorsal point" in hepatic colic, cramp of the stomach, &c., and advised remedies to be addressed to this "point," but now the matter is more clearly comprehended and more fully acted upon. It is to be feared, however, that oftentimes spinal irritation has engrossed the attention of practitioners to the neglect of equally prominent and important indications to be derived from the consideration of the general system. This point is deserving of more consideration, and to it is especially advised the attention of those who hope to treat those various nervous irritations with success.

Nervous irritations may then exist, as has been remarked, as indications of a primary central affection, or may be produced by what Marshall Hall terms "eccentric radiations," arising from morbid organic impressions reflected upon the centres; and most likely the day will be seen, when the the peripheral expansions will also be admitted as one of the seats of this affection. If it be not so, how will we satisfactorily explain the successful treatment of local affections, apparently unconnected with any constitutional disease and cured by strictly local means as the endermic use of morphia, strychnia, moxa, the ranunculacious alkaloids, solution of cyanide of potass, &c. &c., of the efficiency of which, numerous well authenticated cases leave no doubt?

The developement of these irritations is often coëtantaneous with the rise, and accompany the progress of diseases essentially febrile and marked by decided vascular excitement; when thus connected, there is in the febrile movements an irregularity and some-

times an apparently alarming excitement, owing evidently to the existence of this connection and not remarked in pure phlegmasial diseases. At other times, they appear to arise in the protracted course of constitutional affections, and, as superadditions, bear the same relation to the original disorder that gastrites &c. do when occurring as a consequence of primary vascular excitement; arising in this way, they often survive the original complaint, and after the physical and physiological indications of relief to the primary disease are obtained, the evidences of nervous irritations yet remain and require especial attention for their removal. Not a few cases are published proving this truth.

Assuming all the cases published to be those of true nervous irritations, the belief is confirmed that they are capable of simulating in many respects a great number of diseases; thus there are cases republished from Rust's Magazine, 44th. vol. contributed by Dr. Ens, based upon numerous observations, which show the characteristics of mania, melancholia, chorea, opisthotonos, vertigo, amblyopia, nervous and intermitting fevers, affections of the individual thoracic and abdominal organs, dysmenorrhœa, chlorosis, hysteria &c. In the 14th vol. of the Am. Jour. of Med. Sc. is an interesting case by Dr. Nichols of Massachusetts, detailing his own sufferings and the means of his relief. Hundreds of other cases, scattered through American and European periodicals, could be collected showing these facts conclusively.

How is a *Diagnosis* to be established between these nervous irritations and true inflammations? This can be done in a general way by considering the constitutional habit of the patient, the frequently instantaneous seizure and irregularity in the paroxysms of its exacerbations, their ataxic and metastatic character, and the state of the pulse, which is often but little disturbed even in the midst of a most tremendous tumult, the rapidity in their stages and changes, and in fine, the absence of that determinate fixedness of phenomena which characterizes true phlegmasiæ. In cases presenting the physical appearances of inflammation, yet without corresponding physiological and pathological signs, we may often correctly diagnose nervous irritations, especially when those appearances are suddenly induced in connection with

some manifest nervous disturbance. A lady is now under treatment for hard engorgement of the posterior wall and neck of the uterus, in whose nervous system these displays are made to perfection. She has had the most intense pain of the tongue, succeeded by excruciating headache, and this displaced by spasmodic jerkings of the extremities and ultimately by a temporary paralysis; at other times, there are general muscular spasms, followed by a cataleptic state and in the midst of all this the pulse beats as calmly 76 to 80 per minute as though all were quiet and well. In her case the uterine circle is undoubtedly the point of original morbid sensibility, which having continued for some years, according to her account, has involved the spinal and other centres.

Not so however is the pulse *always* found in these irritations. Case vi, vol. 2d. p. 208 of this journal, exhibited it partaking of the generally diffused irritation, yet in the intervals evincing no signs of any organic affection whatever. But in cases of much intensity, an examination of the spine will often reveal the truth. In addition to those heretofore reported, we may add a case, recently under our care, presenting at first general appearances of spasmodic colic and sliding off into a form of chorea in a little girl aged 6 years. In this case there was excessive spinal sensibility which was greatly relieved and the child improved by leaches to the tender points followed by an epispastic. The patient was gently purged every day during the continuance of vascular excitement and afterward put upon two and a half grain doses of cyanide of iron, thrice daily. Under this plan almost perfect recovery was attained in a little more than three weeks, and in five weeks she was fully restored.

Of the *Treatment*, much has been written; and the various plans suggested have been fruitful themes for controversy and dissention. No plan of treatment can be proposed that will be applicable alike to all cases, for in the adaptation of remedies to this class of affections, oftentimes the most deliberate judgment and reflection of the medical adviser must be exercised.

The initial stage of this disease being frequently marked, for a greater or lesser period, with evident derangement of the assimilation

ating organs, exhibiting a train of gastro-intestinal symptoms, observation should be attentively given to the consideration of their condition, in directing measures of relief. The course of treatment to be pursued in their management in different individuals, must be influenced by and modified according to, the general condition of the system, in which this disease is developed. Called to a case of this affection, occurring in an individual of a full and plethoric habit, in which restlessness and irritability of system are prominent symptoms, there can seldom be a question as to the propriety of venesection, and especially is this necessary in cases where the muscular apparatus responds to the morbid impression, producing convulsions of greater or lesser intensity. In this condition the powerful contractions of the muscular fibres compressing the blood vessels, and thus forcing their contents into the internal vessels, have a very serious tendency to the production of congestions and vascular plethora in other organs. When this obtains we must have recourse to a full bleeding from one of the extremities. When the brain appears to suffer greatly from this morbid accumulation of the blood, bloodletting performed in that region promises perhaps more speedy relief than venesection of the arm or foot.

This consideration becomes more urgent, if the paroxysm is disposed to continue without occasional and complete intermission. In cases manifesting derangement of the abdominal organs, it is highly important that remedies should, at once, be addressed to them. Generally, on detecting evident disorder of the primæ viæ and associated viscera, it is of great importance to administer with a view to their correction. Probably no medicine is better adapted to this end, than some of the preparations of mercury, which may be expedited in their action, when a prompt effect is desirable, by an addition of any of the vegetable cathartics, avoiding those of a drastic character. They should be used from time to time, in quantity and repetition sufficient thoroughly to remove any impaction that may have happened in the bowels, and also fully to prevent the accumulation of vitiated and acrid secretion in the intestines.

These different quantities may be used according to the impres-

sion sought to be made, and may be administered at night, or during the day as may be deemed preferable.

Attention should at once be directed to the spine and careful manipulation instituted. Percussion and pressure should both be used, and every vertebra gone over successively. By varying the direction of the pressure, pain may become more decidedly evident, than if applied immediately on a line with the vertebra. Percussion betrays tenderness sometimes, after pressure has failed. It may be added, that in examinations of the spine, in cases of this affection, there will generally be detected tenderness, of more or less severity. The pressure upon the spine will very often be found to aggravate the pain, though seated in a remote part. If very decided morbid sensibility should be detected in any portion of the spinal column, it is highly important that local bleeding, corresponding in amount to the intensity of the affection, should be practised at that region. Where leeches can be obtained, it is better to apply them to the tender vertebræ immediately, but if cupping is practised, it should be done upon the contiguous surfaces, the pressure of the cups often producing a considerable degree of pain, when applied to the painful vertebræ. Any irritating application to the spine, should be omitted at this stage, or until the general excitement is very materially subdued, and the pain and tenderness become sensibly diminished by the bleeding. Any attempt at palliation by merely vesicating the spot, at which the force of the disease is displayed, will almost certainly prove nugatory. Not so however with all the topical applications. With prospect of temporary benefit, the cuticle may be abraded by the oil of cantharadin, which acts very promptly, over the seat of pain, and any of the salts of morphia, the sulphate is preferable, may be sprinkled upon the surface of the blister. For the affections of the cranial nerves, this will be found most applicable, and will oftentimes greatly mitigate the intensity of suffering. When the pain is developed in the extremities, nothing has afforded more satisfaction, than the application of an infusion made as follows:

R. Pulv. Gum. Myrrh. ℥ iv.
Pulv. Piper. Rub. ℥ iv.
Sp. Vin. Dilut. Oij. M.

Infuse with a moderate heat until the liquid becomes impregnated with the properties of the powders, and apply to the affected part as hot as can be borne, and envelope with a flannel roller. Closely allied to this, is the practice of steaming the part with various medicated fluids; yet it has not answered so well.

Should the constitutional disturbance still remain unsubdued, recourse must be had to the class of sedative (we do not mean anodyne or narcotic) agents to moderate the vascular excitement and quiet the irritation of the heart, which, during their existence although influenced in part by the nervous irritations, do nevertheless tend in a remarkable manner to perpetuate these very irritations. In this sedative class are included antimonials, digitalis, salines, &c. During this stage, not unfrequently, topical capillary congestions are induced which modify the rôle of organic actions to a greater or lesser degree, and require to be carefully observed and pointedly treated, by local depletion, &c.

The most frequent connection of these irritations with febrile affections is found in remitting and intermitting diseases, whether of a simple or congestive character. Since there is a better understanding of the pathology of the nervous system, some of the cases of BAILLY, observed at Rome in 1820—1—2; of CLEGHORN in his work on the fevers of Minorca; of LIND in his treatise on hot climates; of SENAC in his work on fevers; of CLARKE in his “long voyages to hot countries” and a vast number of others of like character, derive a new interest and can be read with both pleasure and profit by the physicians of the present day.

In cases like these the use of quinine becomes indispensably necessary upon the occurrence of the earliest intermission or decided remission, in order to break up their diseased associations and prevent the overwhelming of the vital forces. The consideration of congestive nervous fevers might here be taken into view and enlarged to a great extent, upon the advantage, nay necessity, of treating these fevers as cases of complicated nervous and angeal diseases, and of employing blood letting even and quinine almost

simultaneously for their eradication. This is not wisdom above what has been proved. But as it would lead to very lengthy observations, its further consideration is dismissed here. We cannot however refrain from allusion to the effect of quinine, especially in large doses, as manifested in these affections. Regarded generally as an excitant in its operation, practitioners have been loth to use it, even in febriculous states of the system. That there is some error in this estimate of its action upon the system, does not admit of doubt. That quinine is not stimulant is at once proved by the fact, that the vascular system is little, if at all affected immediately, by its administration, and the very palpable difference between the effects of this article and that of tonics proper on the nutritive processes of life, demonstrates that it is not strictly a tonic. The numerous instances of its successful use in fevers in large doses proves its primary sedative effect upon the nervous system; that this is its true action careful observation will establish. Bailly himself took a hundred grains in five days with relief to his fever. Dr. May, of Alabama, in the *Transylvania Journal*, vol. 10, publishes his own case of quotidian remittent, the paroxysms coming on about 10, A. M. and the remission at 1 or 2 at night. On the fourth evening he was bled and began the quinine, 15 grains at a dose, before the fever had left him and repeated it every two hours until he had a drachm. The fever left him while he was taking these doses and he had an intermission complete. He continued the quinine for ten days in smaller quantites.

In the 13th vol. of *American Journal* is a paper by Dr. Monett, of Mississippi, on the use of sulphate of quinine in febrile affections, which contains matter of much interest and utility. When in the earlier period of our professional life, this paper was published, it was regarded as the effusion of a mistaken observer, but anxious observation of disease and subsequent personal experiment have removed these prejudices. Some seven years ago the writer was attacked with a quotidian fever with considerable remissions during the night and increase about 11, A. M. After two paroxysms, an emetic taken on the morning of the third day not only failed to break, but appeared to aggravate the succeeding one; on

the morning of the fourth day quinine was commenced in doses of two grains each and repeated frequently until the hour of accession; nearly a scruple of quinine was taken in this time, which prevented the accession, and was followed by complete remission, and without another grain of medicine of any kind convalescence and recovery followed.

In the preceding remarks, reference has been had particularly to those cases exhibiting a considerable degree of vascular disturbance. Cases occurring of less intensity in their symptoms and less manifestation of deep implication of some of the great nervous centres, require nevertheless a due regard to the removal or amendment of the abdominal derangements, and existing condition in the source of their nerves. Having premised alteratives or purgatives, as the case may be, in the affections of moderate developement, local depletion, as before directed, should be instituted, followed by a vesicatory to the central part. When there is much gastric oppression, occasioned either by an accumulation of ingesta, or by a depravation of the normal secretions of the viscera, an emetic will doubtless prove of much service in removing the impurities, and be a beneficial antecedent to the subsequent alteratives or cathartics. Nausea is found, even in the absence of this morbid condition of the *primæ viæ*, to exercise a very controlling influence over many of the diseases accompanied by severity of pain; and in some of the affections analogous to neuralgia, it has proved a most potent agent in their treatment. In the form of neuralgia displaying itself as hemicrania, or a general tenderness of the scalp, no plan of treatment is more successful than the conjunction of depletion from the cervical spine followed by moxa or a vesicatory, and the use of emetics, repeated several times; yet as has been already intimated, emetics should not be used, in a paroxysm of great intensity until after due depletion has been practised. Although this form of the affection frequently originates primarily in the stomach or the collatitious apparatus, yet the nervous system becomes a point of secondary irritation, which irritation is the immediate cause of the cranial implication; and, as is so often the tendency of the nervous system, becomes somewhat independent of the gastric cause. The

nervous system when it takes on disease, even secondarily, is remarkably prone to assume an independence of action, and to call for remedies appropriated specially to its indications. The preceding course is to be pursued so long as the action seems to be urgent, or intermissions in the attack are not evident.

The internal use of opium, although appearing to promise relief, from its peculiar power in assuaging or relieving pain in many diseases, is not found of corresponding advantage in the one under consideration, when given with a view to its anodyne influence upon the system. In the affections of the sympathetic system, however, its utility is more extensive.

When the disease assumes a less severe character in its aggression and development, or has been reduced to that condition from one of more intensity and observes in its returns or aggravations some regularity of periodicity, additional and somewhat different means are then to be adopted. Although a perseverance in attention to the nervous centres, will generally be successful in mitigating and almost relieving the disease, yet it has generally been found necessary to add constitutional remedies for its complete extermination.

Great care is, however, necessary to ensure a judicious administration of these remedies, as well to avoid failure as to secure success. While the disease continues violent and before adequate impression is made, by depletion, purging, sedatives, &c. as need may be, the use of these means will in the general be found unavailing. Without enumerating the variety of articles of this class that have been found beneficial, it may be sufficient to say that cinchona, quinine, iron, arsenic and some vegetables of the narcotico-acrid class are now resorted to with more general prospect of success than any others. Quinine alone, or in combination with one of the salts of morphia and sulphate of copper, is usually found to answer these indications. To be effectual, it should be given in much larger doses than commonly are administered, but as this not unusually produces unpleasant effects upon the head, it is well to give it in combination with an article calculated to correct this tendency. The combination just spoken of will often succeed, but where it fails to protect the head, the spiritus nitri dulcis may be used with a considerable certainty of ensuring the

toleration of the quinine. There are those of high authority, who declare their want of confidence in quinine, and give decided preference to the *subcarbonate of iron*. This remedy has been largely administered, and in the hands of the earliest essayists, especially Hutchinson, by whom it was introduced, obtained considerable reputation. Very soon after its success was published, the principles that should regulate its use were disregarded, and it was too frequently resorted to under opposite and improper circumstances. It fell into discredit and there are some persons who disregard its remedial powers altogether. That it fails in some cases, is to say only that, which appertains alike to all medicines; but to deny it a powerful agency in breaking up nervous irritations in debilitated and cachectic habits, is to close the eyes against the clearest light and to shut up the understanding against the perception of most palpable truth.

In some cases after the severity is subdued, the disease continues as a soreness and debility of the muscles; here guaiacum, both in simple and ammoniated tincture, proves eminently useful.

Allusion was made to the existence of this condition in states of anæmic and chlorotic embarrassments of the nutritive apparatus, producing defective hæmatisation and its attendant evils. In these profound modifications of the organs, a very guarded and judicious medication can alone offer a hope of relief. Here crippled and embarrassed powers of life are encountered, and our care must be that in the attempt to relieve the organs individually, we do not destroy the weakened and deranged powers by which life is sustained. Here it is that the splendid effects of tonics and roborants, discreetly administered, are so triumphantly exhibited. In managing these complications, local congestions and irritations are often encountered which demand the employment of local depletions and rubefacients or blisters. Although these are necessary, we must never lose sight of the feeble stamina of constitution connected with these local affections, and always be careful not to exhaust these powers by careless or profuse evacuations. These cases observe no fixed rules in their movements and present as embarrassing anomalies as can be encountered in our profession. The evident indications are to support and augment the

powers of the capillary nutritive apparatus, at the same time that we obviate or remove local difficulties and calm and control the nervous irritations. The first indication is generally accomplished by the use of iron in some of its forms, or what in serofulous habits is preferable, a combination of iron and iodine, a wholesome lightly nutritious regimen, and salt water frictions or baths. The tartrate, subcarbonate, or a new form, Vallett's precipitated carbonate of iron, or under the circumstances specified, the liquor of the hydriodate of iron are highly useful medicines; the second indication requires the guarded use of leeches and cups, and revulsive epispastics or cataplasms, and finally the combination of nervous tranquilizers with gentle aperients to accomplish the last purpose. Defective menstruation, usually being a concomitant of these constitutional disturbances, might be supposed to call for the exhibition of the, so called, emenagogues, yet nothing is fraught with more evil, than the attempt to *force* the menstrual flux by these medicines. Suffering in common with the other organs of the body, the uterus is to be relieved only in the general restitution of normal organic influences and movements. In these cases the constitutional action of mercury is to be most anxiously avoided, and as a general rule it may be said, the less of it employed, the better it will be. In many cases of nervous irritations *in connection with vascular excitement and organic inflammation*, mercury is a powerfully available agent in their management, but in those instances connected with *defective nutrition and constitutional lesions of a decidedly asthenic character*, it cannot but prove hurtful. Paradoxical as some may imagine this idea to be, the truth can be learned from the most casual observation. Why is this? Mercury is, beyond doubt, a powerful modifier of capillary vitality, and is eminently useful in thus influencing nervous and capillary sur-excitation in visceral and glandular inflammation, and by the same property indirectly encourages absorption from the organic interstices; in this way hyperformations of various kinds are removed during the use and influence of mercury. But this very effect exhibited in such cases proves the reason of its inadmissibility in the other cases. While its action is manifested in a salutary way, upon inflamed structures,

it powerfully affects organic vitality, and in the end may cause a breaking down of the tissues, by greatly impeding the assimilating processes and the molecular nutritive depositions in the organs. In chlorotic and cachectic states these defective stamina are most apparent; and as mercury, by crippling nutritive actions and hindering the formative processes, would precipitate the case into a still more embarrassed depression, it should be most religiously eschewed, at least, as to its constitutional effects.

Besides the conditions thus far alluded to, in which nervous irritations become an object of treatment, they are frequently developed in states of the general system, neither inflammatory nor chlorotic, nor cachectic, evincing but moderate departure from the condition of usual health. These when located in the sensitive nerves, are the neuralgiæ as generally understood, and may be relieved by a course of treatment in some points essentially varied from those we have considered. Careful enquiry will, in a majority of cases, develop functional embarrassment in some of the important organs, most frequently the digestive and assimilative, and notwithstanding their apparent freedom from profound lesions, they are often obstinate in their persistence. When this is the case however, we are inclined to ascribe this obstinacy of character, not so much to the nature of the disease as to the empirical manner in which it is often treated. Cases, depending upon mechanical causes, as spiculæ of bone compressing, &c., form exceptions to this remark.

These cases are frequently produced by sordes in the bowels, caries or other diseases of the teeth, incipient inflammation of the antrum and such like local conditions throwing out a diffuse radiation, yet not lighting up general excitement. Attention to and removal of, the primitive cause of difficulty can alone ensure relief. After due attention to these causes of disturbance, great relief is usually obtained by the influence of narcotic remedies addressed to the constitution in conjunction with sedatives, endermically, at the seat of pain.

But the unexpected length to which this paper has already reached, forbids our trespassing farther by any other than a very

general allusion to the different remedies and a few practical applications of them.

Internally *Aconite*, or some of its preparations, are worthy of confidence. We have experienced its efficacy in two cases of nervous headache; one of facial neuralgia (the aconite here was given after a purgative) occasioned by loaded bowels, one of neuralgic rheumatism of the right knee; in this case it was given freely and produced disagreeable constriction of the thorax, when the system was fully under its influence; and one case diagnosed as nephritic neuralgia. Etherial extract was the preparation used gr. $\frac{1}{4}$ to $\frac{1}{2}$ the dose.

Colchicum; the wine of the seeds alone has been used. It has proved curative in two cases of facial neuralgia, one of lumbar neuralgia, used after V. S. and a purgative, one of ophthalmic neuralgia, and one of Brodie's "hysterical white swelling" of the right knee, used at the same time that cold vinegar was applied locally. It was usually given with a saline or antacid as the case seemed to require, in doses of from 30 to 60 drops. Scanty urine, with rare evacuations of that fluid, indicates the administration of this remedy in this and other diseases to which it is adapted, in preference to articles of the narcotic class; if enlargement upon this point were allowable here, some practical rules in reference to the use of sedatives proper, or of narcotics, in diseases apparently medicable by either, could be afforded, which might perhaps not be unworthy of attention; but space forbids.

Camphor and Opium; one case of facial neuralgia and one of acute hyteralgia, relieved by full doses; narcosis left malaise for several days.

Opium; one case of severe gastralgia with vomiting, a single full dose induced sleep at 5 o'clock, P. M. which continued until 6 next morning; patient arose perfectly well.* This case was, most assuredly, not gastritis. Imitation of this plan is not always safe.

Dover's Powder; one case of very severe neuralgia of the ham, disabling the patient from walking, commencing after tea, was relieved by 15 grains at bed time which induced sleep and perspiration; next morning the patient was free of all pain and had no return.

*He has never had a return of it.

Bismuth; two cases of enteralgia, one attended by diarrhœa, cured. It has failed in other cases of apparently the same character.

Hyoscyamus with Camphor; two cases of uterine neuralgia, relieved by this combination.

Meglin's Pills have been tried upon two occasions in uterine neuralgia, without benefit. European testimony is decided as to the efficacy of these pills in uterine neuralgia (*Duparcque*) and also in the facial variety. They are composed of ext. valerian. ext. hyoscyami, oxyd zinci. ãã gr.j in a pill, and given in the quantity of two to eight or ten a day.

Ice-Cream, a very palatable remedy to say the least of it. A most interesting case of Mrs. ——. The smallest morsel of solid food taken into the stomach would in a few seconds produce the most intense agony in the side of the neck as high as the angle of the jaw, which would endure for 3 or 4 hours in an excruciating degree. Fluids, unless in very small quantity, produced the same effect. Her sensation of appetite was ravenous and yet she dared not indulge it. We were called to this case at night, in consequence of the severity of an attack, induced by half a cup of tea and a very thin piece of bread not larger than a dollar, as the lady averred and no doubt truly, taken at tea time. Several days had elapsed from the commencement of this painful affection, and the lady was absolutely suffering for want of nourishment. Tongue white-furred, pulse frequent and without force, epigastrium not particularly tender, no nausea induced by any thing swallowed, bowels slow. We were at first puzzled to know what to advise; as a bit of bread the size of a pill would induce the pain, it was feared that, for a time at least, medicine in the stomach would aggravate the already agonizing pain. The indication evidently was to produce powerful sedation of the stomach, with the mildest means possible. Cold suggested itself and ice-cream was deemed a good form. Half a pint of hard frozen ice-cream was immediately obtained from a neighboring confectioner, and one-half of it eaten by the lady, with great fear as to the consequences but with great relief to the pain in less than five minutes. In 15 or 20 minutes half of the remainder was taken and

after a like interval she ate the balance. The pain was now entirely gone, and the lady passed a very tranquil night, enjoying refreshing sleep, of which she had been deprived the two previous ones. The two next days she lived exclusively on ice-cream; upon calling in the evening of the second day she was found to be very comfortable, not having had any return of pain. This evening she was disappointed in procuring ice-cream; we advised her to substitute cream with crusted ice for her evening meal; she did so but suffered with a pretty severe return of her pain which lasted four or five hours in the night; a return to ice-cream next morning was as happy in consequences as its original use had been. We now put her upon the use of *extract of aconite and nitrate of silver* āā gr. $\frac{1}{6}$, four times a day, for several days and then the following

R. Magnesiae ustae ʒj

Aquae Ammoniae fʒj

Aq. Cinnamon.

Aq. Simpl. āā ʒij M. Table-spoonful

four times a day. Bowels moved when necessary by enemata. Cure perfect. Was this an affair of the pneumo-gastric nerve? The relief from the ice-cream, at first trial, was almost instantaneous, and it evidently was a better form of cold than ice and cream unfrozen.

Hydrocyanic Acid displays less power over sensitive excitomotor nerves. It is very useful in the second stage of whooping-cough and in other nervous coughs.

Externally, Moxa passed rapidly during the deflagration along the affected nerve, afforded relief in one case of temporal neuralgia.

Cyanide of Potass; A solution of gr. iv to water ʒj, rubbed upon the affected part, afforded very prompt relief in one case of neuralgia of the right orbitar process and inner canthus of the eye; this case occurred recently and was our first essay with the article. We are greatly encouraged to its further employment. *Lombard* speaks of it with great confidence.

Morphine applied upon a denuded surface, is calculated to as-

suage pain, in doses of gr. ss to j, rubbed up with any mild inert powder.

Stramonium leaves, steeped in hot vinegar, were usefully applied to a knee that remained painful for some time after the apparently entire removal of a rheumatism. Whether the stramonium, the vinegar, or the heat was the beneficial agent, every one may decide for himself. In a case of neuralgia testis, keeping the scrotum constantly covered with the ointment, and the simultaneous use of tincture of myrrh and capsicum to the lumbar spine as a rubefacient, was followed in a few days by relief.

Ammonia, in the form of Granville's lotion, extinguishes local pain when it is superficial, but is apt to leave troublesome inflammation if too long applied. It should not be used about the eyes or nose, for an obvious reason.

Turpentine with *Camphor*, solution of camphor 3 ij to spts. terebinth. 3 jss; is a very efficacious application to those chronic pains commonly called rheumatic.

Veratria has not answered the expectations formed, when we read Turnbull's cases. In one very chronic case it appeared to be slowly working a cure, but the death of the patient from pneumonia, prevented a continued trial. In other cases it has totally failed with us.

Leeches to the painful part have a few times, but not generally, been of advantage.

Acupuncturation, in one case affecting two fingers of the same hand, afforded relief. The patient experienced the sensation of an aura passing along the introduced needles. In other cases it has been of no benefit.

Electricity, *Galvanism* and the *Magnet* are uncertain in their effect.

ART. III.—*Ligature of the External Iliac Artery for Femoral Aneurism.* By WILLIAM POWER, M. D., one of the Attending Physicians to the Baltimore Alms-house Hospital.

CHRISTOPHER DALY, a native of Baltimore County, æt. 61, entered the surgical ward on the 1st of July; a man of stout frame, very youthful appearance for one of his years, and enjoying excellent health with the exception of the aneurismal disease for which he came to the hospital. He is a hard working field labourer, and with some intermissions this has been his calling from youth to the present time. He was a soldier during the last war stationed at Craney island, and from thence was transferred to the station in west Florida where he spent six years. Here he had a bilious pleurisy, and this was followed by an intermitting fever which lasted for a long time, and did not leave him until he returned to his home in Maryland. For the last fourteen years he has enjoyed good health, uninterrupted by an attack of any sort unfitting him for his daily labour. About fifteen months ago, according to his best recollection, his attention was first accidentally called to the aneurismal tumor whilst digging in a ditch, and standing in water, though with his feet well protected. Placing his fingers upon it, he says he "distinctly felt a pulse but thought it was in a very strange place."—As it gave him no pain or inconvenience he thought it was nothing serious and continued to work on as usual. About a month had elapsed from this time when he was suddenly seized with violent cramps in the diseased limb, and finding exertion painful he stopped his usual employment, but assisted during the following harvest in the lighter kinds of field labour. The limb was slightly swollen below the tumor when he first discovered it; but after the attacks of cramp, which were from time to time repeated, the swelling increased, together with a sense of numbness diffusing itself over the whole leg. The tumor has steadily continued to increase together with the œdema of the leg. He has for the last eleven months kept quiet and strictly avoided all exertion, and has undergone no treatment until he came under our care. The aneurismal tumor was situated in the

right groin immediately below Poupart's ligament, which was forced a little upwards in an arched form. It was of an irregularly rounded form, about three and a half inches in its perpendicular, and three in its transverse diameter—pointing a little upwards and inwards where the pulsation was more distinctly seen and felt than elsewhere. Its pulsation was evident to the eye—communicated a distinct thrill to the hand when laid upon it, a *bruit de rape* to the stethoscope, and the pulsations were eccentric. Compression upon the iliac artery, on the *psoæ* muscles, arrested all pulsation in the tumor. The external iliac for an inch above the tumor felt larger than the artery of the opposite side, and both here and in the continuation of the femoral below the tumor, gave a distinct file-sound to the stethoscope. The lymphatic glands of the groin were swollen and hard—the leg was one-third larger than that of the opposite side—purplish in hue, one degree higher in temperature, affected frequently with cramps, and pain with a sense of numbness over the knee and instep.

Tongue clean, appetite good, bowels regular—skin pleasant, pulse 80, natural, sounds of the heart clear and distinct, chest every where resonant, respiratory murmur vesicular, no ossification of the arteries at the wrist. The rest and quiet of the hospital reduced in a degree the œdema of the leg, and caused the tumor to appear more prominent. He was placed on mild diet, and one or two gentle aperients administered. His health remained undisturbed, and his spirits good up to the 19th of July, when, assisted by my colleague, Dr. Annan, and in the presence of several medical friends, the following operation was performed.

An enema having been previously administered, and gutt. lx Tr. opii, given an hour previously, the patient was placed upon a suitable table, his pelvis inclining towards the left side, and an incision made through the skin and common integuments of three inches and a half in length, extending from three-fourths of an inch to the inside, and on a level with the antero-superior spinous process of the ilium, with a curve presenting downwards to about three-fourths of an inch above the external ring—a small vessel running to the skin was divided in the inner angle of this wound and secured. The glistening fibres of the fascia of the external

oblique were then divided, according to a suggestion in the last edition of Dr. N. R. Smith's work on the Arteries, in the same direction, but a half inch above Poupart's ligament. I now attempted to pass my finger under the edge of the external oblique and fascia transversalis, but found the border of the fascia of the external oblique presented such obstruction to free manipulation, by its resistance, that, to facilitate my farther progress, I was obliged to divide it with a buttoned bistoury, thus making a T incision in this fascia. The finger now passed readily down on the outer side of the internal ring, avoiding the cord, and after a little dissection with the nail, came in contact with the artery. Fearing, however, the soundness of the coats of the vessel thus low down, the sac of the peritoneum was gently pushed upwards and separated from the fascia transversalis for an inch and a half; and this membrane, together with the fibres of the internal oblique and transversalis divided by a buttoned bistoury on the finger for three-fourths of an inch. This sufficiently enlarged the wound for easy manipulation. The finger sought the artery about three inches from Poupart's ligament, and with one of Prof. Gibson's needles, armed with a ligature of two strands of sadler's silk, waxed but not twisted, an attempt was made to pass it from without inwards; finding the curve of the needle so great that I could not depress the handle sufficiently on the abdomen, I cautiously separated with the nail the vein from the artery, and passed it from within outwards. The ligature was then drawn tight with some difficulty at this depth, my assistant pressing on the knot until the second was tied. The pulsation immediately ceased in the tumor. The wound was brought together by two points of suture and a few adhesive straps. The operation lasted 25 minutes and was borne extremely well by the patient. The patient after the wound was dressed was carried into a well ventilated room, and placed on a bed with the limb of the side operated upon well flexed on the pelvis.

Complains only of fatigue and numbness of the right limb, with dull pain of the loins and hypogastric region—pulse 80—natural—at 7, P. M. Temperature of right foot, as tested by the thermometer, seven degrees lower than that of the opposite side—gave *Tr. opii, gutt. xxx.*

July 20th. Patient rested tolerably during the night—slept nearly four hours—countenance cheerful—some nausea and anorexia. Pulse 80 as yesterday—skin pleasant, complains of dull pain in the loins, and some cramps in the leg. Tumor decreased one-third in size—hard on its external side, slight pulsation at its inner and upper portion. Right leg florid, only two degrees lower in temperature than the left—ordered venesec. 14 oz. *R.* morphiæ acet. gr. ij. aquæ camphor, $\frac{3}{4}$ iv—dessert-spoonful every two hours. Towards evening his pulse rose to 114. Takes barley water made cold with ice.

July 21st. Appearance much altered—countenance anxious, haggard, eyes sunken and suffused—voice weak—nausea, constant retching—complete anorexia. Tongue reddish along the edges, thirst, skin bathed in perspiration—pulse 140—small—abdomen tympanitic—complains of sharp pain along the recti muscles, in the right iliac region and about the loins—bladder irritable, trying to make water every ten minutes—venesec. oz. 14. *R.* calomel, grs. xv. pulv. opii grs. ij. Added two drops of hydrocyanic acid to each dose of the solution of morphine—40 good leeches applied to the abdomen. At 7, P. M. the leech-bites were still running freely—and had afforded great relief, pulse 130—blood drawn this morning well buffed—still restless—continue anodyne. Tumor as yesterday. Temperature equal on both sides.

July 22d. Countenance much improved—pain and uneasiness much less—abdomen still tympanitic—no movement of the bowels. Pulse 125—fuller but soft—tongue moist—thirst less and asks for food. Still complains of pain in the back and abdomen—bladder still irritable—venesec. 8 oz. *R.* cal. and opium as yesterday—hop fomentation over abdomen. 7, P. M., still improving—skin pleasant—demands food—no passage—blood drawn in the morning lightly buffed, the bleeding made a sensible impression upon his pulse. *R.* cal. grs. viij.—opii. gr. j.—chicken water—and milk iced. Continue solution.

July 23d. Passed a good night—and makes no complaint this morning excepting of his bladder—abdomen much softer, skin pleasant. Pulse 96—soft—tongue clean, no stool—little thirst,

wound gives no pain—an erythematous blush surrounding it for some inches—complains none of the limb. R. sal. rochelle $\frac{3}{4}$ j. aqua $\frac{3}{4}$ viij—wine-glassful every hour. 7, P. M—bowels not moved, complains of flatus—ordered a simple enema.

July 24th. Looks as well as before the operation—makes no complaint—pulse 90, soft—tongue clean—Peritonitis fairly subdued—and we looked forward to a happy result—waking from a sleep at one o'clock he turned over in bed—his nurse a few minutes after was struck by his respiration and altered facies—and a quantity of blood in the bed. I saw him a few moments after—pale, restless—pulse scarce perceptible, almost unconscious—his bed floating in blood—between two and three quarts. The hemorrhage had ceased—a compress was laid over it—nor did it return—he sunk rapidly and died about 7, P. M. It was not deemed advisable to make any effort to secure the vessel, as the slightest shock would have determined dissolution under our hands.

Autopsy 18 hours after death—weather very warm. Head and face purplish, features swollen, bloody serum exuding from eyes—slight greenness about the clavicles and abdomen, rigidity considerable, muscles large and firm. The lips of the wound were united excepting for a half inch on either side of the ligature—this space occupied by a clot of blood—the points of suture had held firmly and there was no disturbance of parts.

The abdomen was opened by incisions from the umbilicus to the pubis and to the edge of the ribs. Their flaps turned down exposed the peritoneum. There was no effusion of serum, no adhesions; but over the tract of the artery extending upwards towards the kidneys, and down into the pelvis to where the peritoneum invests the bladder, this membrane in a space equal to the size of the hand, was of a bluish livid tint, more wrinkled than elsewhere, as if lightly parboiled, presenting numerous whitish yellow points which could be scraped off with the nail—some flakes as large as a half-dime. The membrane was firm, no adhesion with the intestine. The peritonitis had been local and was entirely subdued. The adhesions of the lips of the wound were then torn open—the skin and cellular tissue were the only parts adherent. The blood confined in the wound had insinuated

itself upwards for some distance between the fascia transversalis and the peritoneum, as well as between this membrane and the fascia iliaca; about 4 oz. of clotted blood were removed from the wound. The artery was then exposed and found with the ligature around it; when pressed upon, blood came from an opening, immediately under the knot. It was then carefully dissected out and removed, from Poupart's ligament to the bifurcation of the aorta, and laid open, as well as the external iliac of the opposite side. They were equal in size, at least one-third of an inch in diameter—the inner coat of a creamy-yellow hue, a little rough. The inner coat where the ligature had been applied, on the posterior half of the artery was wrinkled and crimped so as to be smoothed out with some difficulty, but was not cut through, nor was there any effusion of lymph. On the anterior part was the opening—at least one half the circumference of the vessel. The edges a little ragged, of a purplish hue, within a quarter of an inch of the opening—friable and breaking easily under the nail. The outer coat was livid to the same extent—softened and more friable than the rest of the vessel; a soft clot below, but none above the ligature. The vein perfectly sound, no further separated from the artery than by the needle in passing the ligature; this was applied about an inch and a half below the bifurcation of the common iliac and about the same distance from the origin of the epigastric. The tumor in the groin was next laid open and cleansed of its clots. It was about three inches in each diameter, the anterior wall formed by the fascia lata, its lateral and posterior walls by the muscles of the thigh, irregularly anfractuons. The profunda, which was given off very high up, immediately under Poupart's ligament, formed a portion of its posterior boundary. The artery for an inch above where the tumor commenced was filled with osseous concretions, grating under the scalpel, and pricking the fingers. The continuation of the superficial femoral where it emerged from the tumor; from the number and regularity of the circular atheromatous bands, looked more like the trachea than an artery. The aneurismal tumor was very thin and prominent towards the upper and inner part of the thigh. It contained between 4 and 6 oz. of soft black

clotted blood, and as much firm fibrin arranged in layers penetrating into the anfractuositities of the tumor.

The arterial system was every where well developed—these vessels having more than their usual calibre. The heart was large and flabby, its walls thin, a little fatty; the valves all sound—aorta not dilated—other viscera of the chest and abdomen healthy. Head not examined.

REMARKS.—The above case is reported with the hope that its perusal may prove profitable to others, called upon to perform a like operation; as well as with a view to contributing another fact which may serve to elucidate the true causes of secondary hemorrhage. Few cases resulting unfortunately are made known to the profession; and yet it is mainly from the study of these that we must learn what conduces to success or failure. The causes of secondary hemorrhage are yet far from being well understood; and to enable the surgeon to guard with more certainty against this accident, a number of cases like the present must be brought together with their details; compared and analyzed. It is an easy matter to say the coats of the vessel were not sound, and consequently unfitted to bear well the application of the ligature.—By such a sweeping assertion all blame is thrown from the shoulders of the operator, but a candid mind will naturally seek for the existence of other causes and faithfully detail whatever may tend to throw light upon these. That the condition of the vessel a short distance above, and for some distance below the tumor in the present case was unnatural there can be no doubt, and though at the point where the ligature was applied its inner coat was wrinkled and thickened, still it was here as healthy as the external iliac of the opposite side, and it does not appear that this in itself could have been the cause of the hemorrhage; for the outer coat maintained its natural appearance and properties. There was no unnecessary violence used with the artery during the operation, nor was it denuded to any greater extent than was absolutely necessary to admit the passage of the needle, so that ulceration or gangrene of its coats from destruction of the *vasa vasorum* was out of the question. There was no appearance of suppuration in or about the wound at any time, but on the contrary this

seemed to have every disposition to heal kindly. Hence the walls of the vessel could not have been softened by being bathed in pus surrounding them, nor did the peritoneal inflammation seem to exert any pernicious influence external to the sac of that membrane. The effect which the active treatment used to counteract this peritoneal inflammation may have had in preventing the effusion of lymph and the formation of a proper coagulum, by diminishing the richness and plasticity of the blood, is a question which in the present state of our knowledge it is not easy to solve; but were the same symptoms present in another case, the same treatment would be employed, for it would be highly improper to let a patient incur imminent danger from one cause, when the effects of the means used to combat it upon another danger are at most only problematical. None of the above items therefore are entitled to much weight in our estimate of the causes of secondary hemorrhage in this case.

The ligature made use of in the operation was composed of two threads of sadler's silk, waxed but not twisted, thus forming a flattish band; it was applied with the extremities of the fingers at the bottom of a deep, narrow wound, at great mechanical disadvantage. I did not feel the inner coats give way, and therefore renewed several times the traction upon the ends of the thread, with as much force as could be applied under the circumstances; thinking the coats might have yielded little by little under these successive efforts, and finding the pulsation below the point of its application entirely arrested, it was secured by a second knot.— On examining the vessel, the inner coats of that half of it which was not ulcerated through, were found wrinkled and crimped closely, these folds held together by delicate bands, and smoothed out with much difficulty, but not cut through. According to the experiments of Jones, in his admirable treatise on hemorrhage, this sort of incised wound through the inner coats, is the main source from which the coagulable lymph is derived, which is the effectual cause of closure in an artery to which the ligature has been applied; and this adhesion from coagulable lymph, takes place in dogs and horses a few hours after these coats have been thus divided. Granting the force and weight of Jones' views,

still the non-section of the inner coats is not an absolute reason, why the adhesive or obliterating process should not take place. Many surgeons have held the doctrine, that a force barely sufficient to keep the two surfaces of the inner coat in contact is sufficient to develop this adhesive inflammation; and they have devised different modes of applying the ligature with the express view of sparing these coats, and thus lessening the chance of secondary hemorrhage. Though success has followed in many instances the application of ligatures where the inner coats were not divided, still the weight of testimony is in favor of the doctrine of Jones; and doubtless the want of a perfect division of these was one cause of the fatal result in the case now under consideration.

The redness, softening, and ulceration had taken place on the anterior part of the vessel immediately under the knot, in a space equal in extent to a quarter of a dollar around the ruptured part. The irregular compression of the knot may have determined the softening, &c. in this spot rather than in another; but it is right to state that both my assistant and myself had on the morning of the operation examined the body of a female who died with tubercular peritonitis. Dreading some unpleasant consequences I had washed carefully three times before operating, yet without getting rid entirely of the cadaveric odor, which was more evident on my assistant's hands than on mine. His finger was pressed upon the knot, and may it not be that a specific inflammation, ulcerative in its character, may have had some relation with this cause? The pathology of morbid animal poisons is not well understood—but subjects dying with serous inflammations have been regarded as more likely to produce poisoned wounds than others. In puerperal or other acute peritonites, there is no doubt of the envenomed character of the products of inflammation causing dangerous wounds when applied to abraded surfaces. With regard to tubercular peritonitis the facts are not so notorious; still this, though a problematical cause, deserves to be considered.

During the peritonitis the patient was restless and changed his position more than was desirable, thus causing the artery to be more fretted and rubbed by the ligature than it would otherwise

have been ; and the immediate cause of rupture was turning himself in bed. Notwithstanding the generally received doctrines, it appears to me that the facts we possess in relation to this subject are not sufficient to form a just estimate of the propriety of applying two ligatures and dividing the vessel between them. This would seem, *a priori*, to place the vessel in a condition approximating more to that of arteries in stumps, where secondary hemorrhage is comparatively a rare accident. In operations upon the external iliac in particular, which is loosely imbedded in cellular tissue and more affected by motion of the leg and trunk than the superficial femoral or other vessels bound down by muscles, I think the old practice or theory, of J. Bell, Abernethy and others, of dividing the vessel, suffering it to retract in the cellular tissue, thus relieving it from strain, and ensuring more certainly an effusion of lymph, and its consequent adhesion, before the ligature should have ulcerated through its coats, might render the terrible accident of secondary hemorrhage less likely to occur.

ART. IV.—*Suggestions in relation to the Production of Counter-congestion as a Remedial Agent.* By N. R. SMITH, M. D., Professor of Surgery in the University of Maryland.

COUNTER-CONGESTION is, if I mistake not, a new phrase in medicine. I hope to be able to shew that it is not an unmeaning one. That its agency is but partially considered under the head of counter-irritation, or revulsion, will presently be manifest. Counter-irritation, as a remedial principle, constitutes the very basis of modern therapeutics. The more intimately we become acquainted with the relations of remedies to the vital powers, the more general do we discover the scope of this principle to be. The most powerful agents of the *materia medica* act as revellents. Many which were once believed to exert an inscrutable specific influence are now known to accomplish their effects by revulsion,—by supplanting diseased action—transferring excitement.

The production of a certain degree of counter-congestion is oft-

en involved in the production of counter-irritation. But a counter-flux of blood does not always follow from the counter-impression made upon the nerves of a part. Counter-irritation, of a high degree, and salutary effect, is often unaccompanied with any manifest congestion of the part. So also may counter-congestion be effected, in a manner capable of influencing remarkably the living system, without any revulsive impression on the sentient qualities of a part.

Counter-congestion, as a remedy, has not been altogether neglected in medicine. Almost the only mode, however, in which it has been directly effected, is by the process of cupping. This agent, as is well known, is often brought into requisition in congestive forms of disease; in cholera; in congestive fevers; in apoplexy; in congestion of the lungs, and of the heart.

In Duncan's commentaries, as early as 1794, Dr. Kellie suggested the employment of the tourniquet in the treatment of the cold stage of intermittent fever. The remedy has since been frequently resorted to with salutary results, but I believe with not a very correct appreciation of its *modus operandi*. If I mistake not, it has been generally supposed that the effects resulted from the compression of the artery in the member, and the concentration of the heart's power on other and more important parts, whereby the necessary re-action was accelerated.

The surgeon who has often employed the tourniquet in amputations, well knows that, even carefully managed with a view to economy in the loss of blood, much engorgement of the vessels of the member is the necessary consequence of its application. However applied, the tourniquet will always arrest the return of blood by the veins before its flow is, in any considerable degree, arrested through the arteries. And even when applied closely enough to arrest pulsation, if it be not from time to time screwed more closely, as the soft parts yield to the band, the flow by the arteries will be renewed. During all this time, however, no blood will be returned by the veins, and they therefore must become engorged.

I have always, in my surgical course, spoken emphatically of the precautions necessary to save blood in amputations practised

on feeble patients. To prevent the engorgement of the member, it is necessary to elevate it before applying the tourniquet, and to compress the veins,—then to screw up the tourniquet suddenly, so as to arrest the flow in the arteries and veins as nearly at the same moment as possible. Where these precautions are neglected, each stroke of the amputating knife is followed by a copious gush of venous blood, most of which might have been saved by a different mode of proceeding. In amputating we often observe that, although at the first moment of the application of the tourniquet, the arterial flow ceases; yet, as the operation progresses, it is resumed, and the machine requires to be screwed closer from time to time.

It is quite certain, therefore, that, in the mode in which the tourniquet would be applied for the interruption of an intermittent, great venous engorgement of the member would be produced.

Congestion of the deep organs is the prevailing pathological state in the cold stage of an intermittent. Whatever would derive the blood from those organs, and cause a stasis of that fluid in the extreme parts, would certainly counteract the prevailing symptoms. The counter-congestion created by the tourniquet is certainly the most important physical effect, and therefore to it we shall most rationally ascribe the remedial agency.

In general diseases of a congestive character, the organs oppressed by the accumulated fluids are—the heart—the brain—the lungs—the liver—the spleen—the stomach and intestines. The extreme parts are comparatively exsanguinous. The grand indication is, of course, to restore the equilibrium—to solicit the fluids from the suffering organs, and to restore them to the parts which they have deserted. Revulsion by external heat and by counter-irritants is certainly an important adjuvant, but often more potent means are requisite. The lancet is often resorted to with signal advantage, blood being taken from a small orifice, slowly, and in the horizontal posture. This abstraction of blood has for its object, primarily, the relief of the over-distended heart and great vessels. It is sometimes practised when there exists no other indication for bleeding—nay, often when the general condition contraindicates the lancet; when it is of course an equivocal means, the

propriety of resorting to which is one of the nicest points in therapeutics to decide upon ;—a means, the successful management of which, requires careful attention to many adjuvant remedies ;—sometimes even the use of powerful stimulants.

In congestion, blood is sometimes taken which we would gladly restore to the system, the congestion being relieved and re-action established.

Would it not then be desirable, if possible, to *borrow* from the circulation a portion of its fluids, till the heart is relieved? May not this be effected by the production of *counter-congestion*? Can not this *counter-congestion* be effected by the application of tourniquets—one to the thigh, and one to the arm?

Observe the effect of these agents, applied with sufficient constriction to arrest the return of blood by the veins but not to compress the arteries. In a moment the limb becomes engorged,—every vein is distended; the dark hue of the surface gives evidence that the capillaries are distended. In this condition of the limb, there accumulates in it probably a third more blood than it ordinarily circulates. The arm, for instance, may perhaps thus withhold from the circulation, for a time, twelve ounces of blood,—the lower extremity twice that quantity.

Now if the tourniquet be applied to the thigh and arm in congestive disease, the same effect, though tardily, will take place,—the members will become engorged. We take from the general circulation, for a time, more blood than we should dare to abstract by the lancet; and we see no reason why, in relation to the heart and great vessels, the effect should not be the same as its complete removal. The heart thus relieved may be expected to re-act, especially if prompted by other agents, and when once it does so effectually, the imprisoned blood might be allowed to re-enter the circulation.

Is not the effect, which in congestive diseases has sometimes been ascribed to the abstraction of a few drops of blood, partly, perhaps mainly, ascribable to the long continued engorgement of the limb in the attempts to obtain blood,—ligatures being perhaps, in these attempts, applied to both arms?

In that form of epilepsy, the paroxysms of which are preceded

by the aura epileptica, it is well known that the development of the paroxysm is occasionally arrested by the application of the tourniquet, or ligature, to the affected member. The effect has been ascribed to the interruption of the progress of the aura, whatever it may be, along the nerves. But in epilepsy congestion of the brain plays an important pathological part; and may not the tourniquet be chiefly effectual by the necessary counter-congestion created by it? To determine this it would only be necessary to apply the tourniquet in those cases of epilepsy not characterised by the aura, but by some other premonition, which would give opportunity to resort to it. One opportunity to apply it thus has occurred to me. I happened, not long since, to be present when a patient, whose attacks were always preceded by sensations which made him aware of their approach, was threatened with an attack. I directed the application of the garrot (handkerchief and stick) to one arm and one thigh. No convulsion occurred.

I shall be prepared before long, to present a series of cases illustrating the effects of counter-congestion.

ART. V.—*Retroversion of the Uterus relieved by Percussion.*
By JOHN CHAPMAN, M. D., of Baltimore.

Case I.—A Lady, thirty years of age, in the third month of pregnancy, was taken with retention of urine, and could get relief only by the use of the catheter. After emptying the bladder, a further examination ascertained the cause to be retroversion of the uterus, accompanied by a severe attack of piles, which were large, numerous, and very painful. The catheter was used at regular intervals for four days. At length she was relieved in the following manner:—She was placed on her knees, elevated by pillows, and her shoulders brought low down into a hollow of the bed. Whilst in this position, I took a small pillow, thrust it to the bottom of its case, and gathering the mouth of the case in my hand, struck her repeatedly over the back of the pelvis with

the lower end of the pillow. After having struck her nine or ten smart blows, she said she felt something move internally; on examination, I found the retroversion removed, and she had no more trouble in passing her urine.

Case II.—A lady, in the third month of pregnancy with her fourth child, was taken with retention of urine, caused by retroversion of the uterus. The bladder had not been emptied for thirty-six hours, although small quantities of urine had occasionally passed by severe straining. After the bladder was relieved, she was suffered to repose, and, at proper intervals, the catheter was used three times. I then tried percussion, as in the former case, but without immediate effect. She was desired to have it repeated by her attendant, every hour or two, during the day, and being anxious to get relief she told me she did not spare the remedy. At my next visit she had passed her urine freely at a natural call. On one occasion, when struck by the pillow, she felt something move internally, which was doubtless the ascent of the fundus of the uterus.

EPITOME OF
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——— Like the bee, tolling from every flower
The virtuous sweets, we bring them to the hive.

SHAKESPEARE.

*The New England Quarterly Journal of Medicine and Surgery.**
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ART. 1. *Tic Douloureux, imitated by Diseases of the Teeth; a paper read before the Boston Society for Medical Improvement, by Thomas Gray, Jr., M. D.*—*Tic Douloureux*, the *neuralgia faciei* of Dr. Good, is usually considered an affection of the second and third branches of the fifth pair of nerves, or of the portio dura of the seventh, or of both. These nerves, supplying the superior and inferior maxillary branches, are of course identical with those concerned in *tooth-ache*; and the same pain, traversing the same nerves, must render it impossible for the patient to distinguish the cause, merely by his own sensations. To enable the practitioner to ascertain whether the pain arises, in any given case, from diseases of the teeth, or is independent of any morbid condition of those organs, is the object of the present useful essay. Dr. Gray enumerates four different affections of the teeth which may give rise to neuralgic pain similar to *tic douloureux*.

1. The first and most frequent cause of tooth-ache is decay of the tooth, whether commencing on the surface of the organ, or in its centre. In the former case, the condition of the tooth is sufficiently obvious, upon a proper examination; in the latter, it is indicated by a single dark speck upon the crown of the tooth, not

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larger than might be made by dipping the point of a pen in ink, and impressing it there. In either case, the remedy consists in properly filling the cavity; but this operation occasionally gives origin, either immediately or at a period more or less remote, to severe pain. This occurs where there is only a very thin lamina of bone intervening between the nerve and the material used in filling the cavity. The pressure upon the nerve is borne for a time without any inconvenience, but its steady and sustained character finally produces irritation, which, if not soon relieved, develops all the symptoms of *tic douloureux*. The pain sometimes occurs not until several days after the tooth has been filled, and is then felt in a very different place from its real one, perhaps most frequently in the antagonist tooth of the other jaw. It occurs not unfrequently in a tooth which has been filled for years, and which seems beyond suspicion.

Errors are often committed in the treatment of carious teeth, in consequence of the difficulty of ascertaining the tooth which is affected. The faulty one may appear, unless to an experienced eye, perfectly sound. Some other is then sought for, whose appearance is less prepossessing; this is extracted, and of course without relief. In this manner after the patient has been deprived of nearly all his teeth, he comes to the conclusion that his case is true *tic douloureux*, and he is thenceforth abandoned to a long course of wearisome and useless treatment.

2. Another case in which tooth-ache may be mistaken for *tic douloureux* is when the pain arises from the filtration of some fluid into the empty canal of the nerve or nerves, after they have perished. A tooth in this state will often occasion no pain until its cavity is filled. The fluids, then finding no outlet above, react below, producing pain along the course of the nerves; and as there is frequently no sensation about the tooth itself, *tic douloureux* is at once set down as the cause. A greater or less degree of lameness about the tooth in biting, conjoined with the history of the case, will generally explain the true nature of the affection. The best remedy is to fill the canals of the nerves to the bottom; or, where this cannot be done, to preserve a communication from the common chamber of the nerves, by introducing a wire into it

when filling the cavity of the tooth. The wire is afterwards to be withdrawn, and the passage which it leaves may be kept open with a bristle, and an outlet thus afforded to the irritating fluid.

3. A third source of error arises from two antagonist teeth striking too hard together, in consequence of one of them being underly protruded by temporary inflammation about its root. A case of this kind may be easily detected, and requires for its relief a little filing at the point of contact of the two teeth, and the application of a leech near the root of the one which is inflamed.

4. The last source of error in connexion with this subject, and the most obscure of them all, is when the wisdom-tooth, in consequence of want of room in the jaw, and probably from some obliquity in its direction, in endeavouring to perforate the gum, strikes below the crown of the last molar tooth. The pain in this case is excruciating, and felt every where except at the actual seat of disease. It often fastens upon one of the bicuspid: this will probably be sacrificed, as well as others, before the real state of things is discovered. Whenever a patient suspects a bicuspid which the physician is satisfied is sound, the wisdom-tooth should be examined; it will generally be found to be in some way diseased. Where it has not passed through the gum, and there is reason to think that its appearance is prevented by the opposition of the last molar tooth, the extraction of that tooth affords a speedy and effectual remedy.

In all doubtful cases of neuralgia about the face, careful examination must be made by pressure upon the sides, roots, and crowns of the teeth in every direction, to learn if there be any soreness felt. Examine with a mirror and an instrument in every part, to learn if there be no caries. Dip the fingers in cold water, and seize the tooth between them; or inject cold water with a fine syringe about the tooth, to ascertain if there be no sudden sense of aching. In the same manner try warm water; and conjoin this with all the historical evidence of the case. Examine, with especial care, the wisdom-teeth, or the gum, if they are not yet through. *Above all reserve extraction as a last resort.*

The tic douloureux and tooth ache of pregnant women may often be entirely cured by a single leech, or a little of the ointment

of veratria, in the proportion of from one to three grains to the drachm of simple cerate, rubbed over the face, along the course of the nerves, till the sensation of tingling, which is usually accompanied by relief, is induced.

ART. 2. *On the use of Ergot in Protracted Parturition; a paper read before the Boston Society for Medical Improvement, by Edward Warren, M. D.*—Dr. Warren, in common with almost all well-informed physicians in our country, entertains no doubt respecting the utility of ergot when judiciously employed. If exhibited too early, or under unsuitable conditions, it may, he thinks, occasion the death of the child, and may perhaps be injurious to the mother. He has found it particularly useful in cases where the pains suddenly subside when the labor is nearly accomplished, and in patients of feeble constitutions and general bad health, in whom the pains are irregular and inefficient, never entirely ceasing, but yet not propelling the child, although the soft parts are fully relaxed, and there is no perceptible obstacle to delivery. He relates seven cases in which he has administered ergot during the last year or two, none of them of especial interest. In all instances in which he has given it, the children have been perfectly hearty and healthy, and have continued so. In every case delivery has taken place within two hours after its exhibition. Some women were sooner affected by it than others, in the same manner as some are sooner acted upon by cathartics or by stimulants than others; still its action could be sufficiently distinguished in every case.

ART. 3. *An Abstract of 500 cases of Midwifery; a paper read before the Boston Society for Medical Improvement, by D. Humphreys Storer, M. D.*—Of Dr. Storer's 500 cases, 492 were presentations of the head; two of an arm; two of the feet; three of the breech; and one of the knees. In one of the arm presentations, turning was effected; in the other, it was necessary to open the thorax. In one of the feet presentations, the child was destroyed, by the constant and violent motions of the mother, who was perfectly unmanageable from chorea.

In 280 cases, 173 occurred between the hours of 7 o'clock, P. M. and 7, A. M.; and 107 cases between 7, A. M. and 7, P. M.

In 384 cases, 219 were male, and 165 female children.

Fourteen female children averaged the weight of 8 lbs. each; sixteen male children averaged 9 lbs. each. The largest child was a male weighing 13 lbs.; the smallest was a female, which weighed 1 lb. 14 oz., and lived 18 hours.

In 89 cases, the average length of the cord was $22 \frac{3}{8}$ inches. The longest cord was 36 inches, the shortest 12 inches.

In the 500 cases, there were only three cases of *twins*. In two of these cases both children were females; in the other, one was a male and one a female. Each of the twin cases was rapid in its progress. From the examination of a large number of tables, Dr. S. has found that a case of twins occurs in about every 70 cases of labor. In some of the foreign hospitals the proportion is one case in 90. In the practice of some private practitioners, they are as frequent as one in every 60 cases. In Dr. Storer's experience, they have been as rare as one in 166 cases.

In the 500 cases, there were *four* deformed children. One was an acephalous monster; one presented spina bifida; one had distortion of both feet—varus; and one had a hare-lip.

In the acephalous child, the cerebrum was covered with the dura mater, which was ruptured during its expulsion, and a small portion of the brain protruded. The nurse was requested to make no efforts to preserve it; it was not even dressed, yet in this state it lived 24 hours, making no cry, but stretching out its arms and legs as if affected with spasms.

Dr. S. has met with two cases, one at the full period, the other at the end of seven and a half months, of children expelled with the *membranes unbroken*.

In one case where very sudden death occurred in a woman in labor, the parietes of the neck of the uterus were found to be partially ruptured, the peritoneal coat not being lacerated. This partial rupture is mentioned by Collins as an accident as speedily fatal as laceration of all the tissues.

In the 500 cases, there was but one instance of fatal *puerperal peritonitis*.

ART. 4. *Scarlet Fever.—Cases and Remarks.* By Enoch Hale, Jr., M. D.—A paper, which, as its author modestly states,

lays no claim to novelty, either of fact or speculation. From the beginning of December last to the end of March, 31 cases of scarlet fever had fallen under his care,—6 adults and 25 children. In 14 of these cases there was a secondary attack or renewal of the disease in another form, after the febrile stage had passed away, and the patient had seemed in a greater or less degree convalescent. In 12 cases, the secondary attack consisted of, or was accompanied by, a swelling of the glands of the throat. In three or four cases, there was otorrhœa with temporary deafness. In three cases, there was a return of the eruption, after an interval of more than a month, exhibiting very nearly the same appearances as at first, and continuing for two or three days. In one case, the secondary attack was a general anasarca, and in another it was pneumonia. Several of the other cases were too recent at the time of drawing up the report to make it certain whether they would be followed by secondary diseases.

ART. 5. *Comparative Frequency of Tuberculous Diseases.*—By J. B. S. Jackson, M. D.—Out of 604 autopsies made during the last ten years in Boston or its immediate vicinity, death is supposed to have been caused by tuberculous disease in 110 cases, or in about one in $5\frac{1}{2}$, thus tending to confirm the general statement, that in the temperate latitudes about one-sixth or more of our race die from some form of tuberculous disease.

From the whole number, 604, there were excluded 94 cases in which the lungs were not examined, the patients having died of maladies apparently not affecting those organs. There were also excluded 4 cases in which there was a doubt between pneumonia and tuberculous diseases.

Of *Phthisis* there were 93 cases. Of *Acute Meningitis* there were 16, tuberculous disease being found in all of them, either in the lungs, or bronchial glands, or in both. In a case of tubercular *Peritonitis*, although the bronchial glands were considerably diseased, only a single granulation was found in the lungs.

Of the remaining 396 cases, in 306 there was no tuberculous disease found, nor any remains of such disease. The *wilted appearance* so often met with at the apex of the lungs was not considered satisfactory evidence of the disease having formerly

existed. The occurrence of *cretaceous matter* was so considered, and all cases where this was found were noted as tuberculous.

In 46 cases, tubercles were found in the lungs alone, and in 21 in the lungs and bronchial glands. In 20, they existed only in the bronchial glands, and were in the *cretaceous* form in all except two.

Tubercles are very rarely found in patients dying from malignant diseases. Of 33 cases of malignant disease, in nearly all of which a careful examination was made for tubercles, in 24 none were found; six times they were found in the lungs alone, and three times in the bronchial glands alone.

Intemperance appears to have no tendency to develop tubercles. Of 35 patients dying of various diseases, all of whom were decidedly intemperate, and most of them grossly so, in 26 no tubercles were found; in five there were tubercles in the lungs; in one in the bronchial glands; in one in the lungs and bronchial glands; and only two died of phthisis. Dr. Jackson concludes his interesting paper by inquiring whether intemperance may be considered as a prophylactic against tubercles; judiciously admitting, however, that if such be the case, the remedy would be worse than the disease.

ART. 6. *Section of Tendo-Achillis, of Adductor Longus, of Sartorius, and Rectus Femoris, and of Tendon of Psoas and Iliac Muscles, in the same subject. By Joseph Sargent, M. D., of Worcester.*—The patient, a boy ten years old, labored under a complication of deformities evidently arising from disease of the cerebro-spinal axis, which was probably occasioned by his habit of drinking, early every morning, water which had been standing all night in a copper pump supplied with lead pipes. When he came under Dr. S.'s care, in standing with the right thigh and leg straight, and the body erect, the left thigh was raised, so that the left foot was lifted from the ground, and the left leg bent on the thigh. In order to put the toes of this foot on the ground, the patient was obliged to stoop a good deal towards his left side, and then the heel remained raised, and the thigh flexed on the pelvis and drawn inwards, with evident contraction of the *gastrocnemii*, of the *semitendinosus*, *semimembranosus* and *biceps*,

of the rectus femoris, the sartorius, and adductor longus. The left thigh was much atrophied; there was some lateral curvature of the spine, and a contraction of the clavicular portion of the left sterno-cleido-mastoid muscle, lifting the clavicle out of its articulation when the patient's head was erect, but allowing of its easy reduction when his head was returned to its inclination towards the left side where he usually kept it.

For the relief of this condition, Dr. S. divided successively the muscles mentioned in the title of his paper, performing the first operation on the 27th of April, and the last on the 19th of June, and making, after each section, continued extension of the limb. The most delicate and dangerous of these operations was the subcutaneous division of the tendon of the psoas and iliac muscles. It has been attempted by no surgeon, as far as Dr. S. is aware, with the exception of M. Guerin, who states that he has accomplished it, but gives no detail of the occasion, the method, or the result of the operation.

The success of Dr. S.'s skill was such, that early in August his patient could walk across the room without the aid of a cane, placing both feet flat upon the floor, and keeping his body a good deal more erect than had been usual with him. He was then advised to return home. In December, his father expressed himself highly gratified with the result of the treatment. During the winter, the patient made himself useful in his father's store, and is at present attending school.

ART. 7. *Report of the Surgical Cases and Operations that occurred in the Massachusetts General Hospital, from Nov. 1, 1840, to March 1, 1841. By George Hayward, M. D., one of the Surgeons to the Hospital.* In the Hospital, Nov. 1st, 19 patients; admitted from that date till March 1st, 69; total 88. Of these were discharged well, 26; much relieved, 26; relieved, 7; not relieved, 4; transferred, 2; not treated, 2; dead, 3; total, 70.—Remaining, March 1st, 18. A table is given of the different diseases that occurred, followed by a series of interesting remarks on various subjects of practical importance. Of these we shall present as brief an abstract as our estimation of their value will allow.

Erysipelas.—During the four months there was no case of this disease in the hospital. Dr. H. states that prior to the autumn of 1837 there had probably not been a year in the twelve preceding ones, in which there had not occurred in the institution one or more fatal cases of erysipelas. At that period a change had been made in the mode of ventilating the wards, and from the time of that change up to April 1842 the disease has in no instance been fatal, but has assumed a less malignant character than formerly, and occurred not more frequently or severely than under similar circumstances in private practice.

With regard to the *treatment* of erysipelas, Dr. Hayward differs from Mr. Liston, who recommends free incisions, and condemns bleeding by leeches, believing the leech-bites liable to prove a source of irritation and to suppurate. Dr. H. declares, that having used leeches freely in this disease for more than fifteen years without such effects, he shall continue the practice until something occurs to convince him that he is in an error. Incisions, he thinks, though they may sometimes be employed with safety and great benefit, are not adapted to all cases, and are occasionally unsafe. Hemorrhage from them has in some instances been excessive and even fatal, and there is probably no one who would employ them in erysipelas of the head and face, where leeches are often used with the utmost advantage.

Deaths.—From Nov. 1, 1840, to March 1, 1841, there were but three deaths among the 88 patients; two in consequence of burns, and one from tuberculous disease of the lungs and mesentery.

Burns.—“Where the injury has been sufficiently severe to disorganize the skin, either with or without destroying any of the subjacent parts, the local application that is first used can be of but little consequence, as the sensibility of the part is destroyed; our principal object is then to support the system, which usually under such circumstances receives a severe shock, especially if the burn be extensive. In doing this, however, we should rely chiefly on mild means, as there is great danger of excessive reaction. Our topical applications in such cases can only be useful when the dead and disorganized parts have been separated

from the living. But in less severe cases, where the vitality of the skin is not destroyed, the pain is intense, and much may be done to lessen suffering by proper local means. In slight burns, cold, in some of its forms, is perfectly safe, and the most comfortable application to the patient. When the injury is on the extremities, this may be applied in the form of iced water, by means of cloths dipped in it and frequently changed, or ice itself. In using the latter, however, care should be taken not to continue it too long at a time, lest the skin be frozen, and painful and troublesome sloughing ensue. But when the burn is over the abdomen or thorax, neither of these applications would perhaps be perfectly safe; and if the skin be unbroken, cloths wet in diluted alcohol and applied to it would be much better. This latter remedy is nearly as comfortable to the patient, and has a greater power than the others of preventing the vesications from being as extensive as they otherwise would be. But in large burns, especially if the skin be broken, equal parts of olive oil and lime-water will be found among the most soothing means that can be used. When these articles are not at hand, soap-suds is a very good substitute; it requires, however, to be removed frequently, and the frothy part only should be applied.

Great relief is often afforded by discharging the contents of the vesicles, especially where they are large. This should be done by making punctures in the sound skin at a little distance from them; it is important to leave the cuticle whole, as it forms the best protection for the inflamed and tender parts beneath."

Where there is an extensive suppurating surface from burns, it is desirable to avoid frequent dressings, which usually give the patient extreme pain. It has been proposed to sprinkle the parts, in such cases, with scorched flour, and to repeat this as often as may be necessary to absorb all the fluids which are effused. The crust which is thus formed, it is said by some, may be allowed to remain till the parts beneath have entirely healed.—In the few cases in which Dr. H. has employed this mode of treatment, he has been pleased with the result.

In some cases of obstinate ulcers following burns, he has found an application, of creosote very useful; diminishing their irrita-

bility and rendering them more inclined to heal. Eight drops of creosote mixed with an ounce of mucilage of gum arabic, or with an ounce of stramonium or marsh-mallows ointment, are the forms in which he has usually employed it.

Enlargement of the Bursa over the Patella.—For this affection, which is called in England *the house-maid's knee*, Dr. H. has found that a very simple mode of treatment, and one which in most cases is effectual, is to puncture the swelling so as to draw off all its contents, and then apply a blister, keeping it open for ten or twelve days by means of savin-cerate, or some other irritating application. When the tumor has existed for a long time, so that the cyst has become much thickened, and its contents changed in character and consistence, this method will not always succeed. In such cases, if the tumor fills again after being punctured, as it usually does, it should be laid open by a free incision. It may be necessary to insert a piece of lint between the lips of the wound to bring on the proper degree of inflammation; should this, however, be excessive, a poultice should be applied. Dr. H. has never seen a case where it was necessary to remove the sack, though it is said that occasionally a cure cannot be effected without it.

Contraction of the Ham-String Tendons.—For a congenital affection of this kind, the ham-string tendons of both legs were divided in a patient 13 years of age. The operation was performed by Dr. Warren, in the usual subcutaneous method. After the wounds in the integuments had healed, and not before, the apparatus for extension was applied. The limbs slowly and gradually came down, and the patient was discharged, a little more than three months after the first operation, much relieved. There had also previously been two patients on whom this operation was performed in the hospital, with a very good degree of success.

Disease of the Hip.—Dr. Hayward is of opinion, that in children under puberty this disease begins most commonly in the synovial membrane or in the bones; while at a later period of life the articular cartilages are more frequently the parts first attacked.

An important circumstance, which has attracted less attention

than might have been expected, is the occasional displacement of the head of the thigh-bone from its articulating surface, without the formation of an abscess. Dr. H. has seen several instances of this kind, in most of which there were severe local and constitutional symptoms before the head of the bone was pushed out of the socket; when this took place, these gradually subsided, and the patients ultimately recovered with limbs more or less shortened. In these cases, the dislocation seemed to have been effected by some morbid deposit made in the joint. The shortening is generally from two to three inches, and in such cases not only is absolute rest important, but extension of the limb should be made as soon as it can be borne, and kept up steadily till a new socket is formed, or the joint becomes ankylosed. To accomplish this, many months will be necessary under the most favorable circumstances. By means of rest and extension, Dr. H. has seen a limb that was three inches shorter than its fellow, brought down, so that there was no apparent difference in their length, hardly a perceptible change in the appearance, and but a very slight degree of lameness in walking. And this was done too without subjecting the patient to any suffering.

In the *treatment* of hip-disease, entire rest is of the utmost importance till the whole morbid process has ceased. Without rest no other means can avail, and when this is strictly enforced hardly any other local measure will be required. In young subjects especially, counter-irritation in all its forms may in most cases be advantageously dispensed with. Where there is much pain, two or three leeches at a time, applied at intervals of three or four days, will be found useful; they are no longer required after the pain has subsided, or after there is evidence that the suppurative process has commenced. In the case of patients beyond the age of puberty, some form of counter-irritation is occasionally useful, and issues are perhaps preferable upon the whole to any other. The best mode of confining the limb is by means of a hollow splint extending from the nates to the foot, and made comfortable to the patient by the help of cotton wadding. Its use should be continued till the disease has passed off; and where an abscess has formed and the head of the bone is dislocated, the

continuance of the splint is of the utmost importance, to prevent the great degree of shortening that would otherwise take place. The common apprehension of friends that confinement of the limb will prove injurious to the patient's health, is altogether groundless; on the contrary, the relief that is usually obtained by the extended position is so great, that the general health is almost uniformly improved by it.

Fractures.—The course pursued in the treatment of fractures of the shaft of the thigh-bone below the middle is to apply the modified apparatus of Desault; in other words, to make use of extension and counter-extension. The patients in the hospital have suffered but little while under treatment, and have usually recovered with scarcely any perceptible lameness or deformity.

The *starch-bandage*, or *immoveable apparatus* as it is called, has, in numerous cases, been applied in the hospital with great advantage. Dr. H. would regard it as not safe to be used immediately after the occurrence of a fracture, if the limb were swollen at the time, or if there was reason to believe, from the degree of injury, that swelling was likely to come on. The swelling in such cases may arise from the effusion that takes place, or from the inflammation that is the consequence of the violence that has been done to the parts. In either case, mechanical pressure cannot prevent it; and it is well known that the combined action of pressure and inflammation will cause a part to ulcerate, and that, if it be continued, sloughing will follow. The indiscriminate resort to this mode of treating fractures is therefore improper.

Another recent improvement in the treatment of fractures, is the introduction of *cold water dressings*. These are especially valuable in compound fractures, and also highly useful in cases of simple fractures in which there is any considerable degree of contusion, or injury of the soft parts. Formerly, the great object in compound fractures was to promote sloughing, and assist nature to separate the dead from the living parts. At present means are used to prevent sloughing, and where this cannot be accomplished, to limit it as far as possible. Among the best agents for this purpose are the cold water dressings and local bleeding by leeches. Instead of hot fomentations and poultices to cases of

compound fractures, cloths dipped in cold water, frequently renewed, are all the dressings that are now deemed requisite in the early stages.

There was one case of *Fracture of the Patella*. The patient was 67 years of age, and in tolerable health, though feeble. He was brought to the hospital sixteen hours after the accident; his knee much swollen, and very painful. His body and limb were placed in such a position as to relax the muscles, and leeches and cold applications were applied to the joint. No apparatus was used till six days after the accident. The limb was then first covered with a roller from the foot to the hip, and a hollow splint applied on the under side, from the nates to the heel. To this were attached two rollers, each two and a half yards long, six inches apart, one above and the other below, and these carried above and below the joint were sufficient, with the aid of compresses, to keep the fragments of the patella in opposition. Union took place in five weeks; passive motion was then gradually given to the joint, so that in two weeks more he walked with ease, and could bend his knee, and was discharged well. The bone was united here, as is usual in such cases, by ligament; but this, where it is short, as in the present instance, is better than a bony union, as it is stronger and less apt to interfere with the motions of the joint.

Hydrocele.—In recent cases of this affection, where no operation has been performed, except, perhaps, that of puncturing, where the sack is but slightly if at all thickened, and where the disease is wholly uncomplicated, it is improper to resort to the treatment by incision without having first tried the effect of injections. Of the different fluids used for this purpose, Dr. H. considers port wine the best. Three or four ounces of this, undiluted, as recommended by Mr. Liston, he has found to answer very well. The tincture of iodine, prepared and used according to the directions of the best writers on the subject, he has known to produce intense pain, and yet fail to effect a cure.

Injections of every kind not unfrequently fail. Sometimes the fluid used escapes into the cellular membrane of the scrotum, producing very troublesome and serious effects; and this is said

to have happened where there was no want of care and skill on the part of the operator. The operation by incision is somewhat more severe than that by injection, and requires the confinement of the patient for at least three or four weeks; on the other hand, it is unattended with danger, and it is certain to effect a cure.—The pain which it produces is also not so much greater than that from injection as is generally supposed; in some instances patients who have undergone both operations, have stated that it was less.

Varicose Ulcers.—These when situated on the leg, their usual seat, readily heal, if the limb be put in a proper position, and attention be given to the diet and state of the bowels. But they are very apt to return when the patient resumes his ordinary pursuits and mode of life, unless something is done to remove the varicose state of the vein on which they depend. This can be effected radically only by obliterating its canal; and various means have been devised for this purpose, the most of which are more or less objectionable, from their tendency to excite severe and occasionally fatal inflammation of the vein. Dr. H. would infer, *a priori*, that dividing the vein would more probably cause its obliteration than any other method; and with his present knowledge, he regards it as more safe, having frequently seen it performed and frequently performed it himself, without ever knowing it to occasion any ill effects. The trouble which is said to have sometimes arisen from it, was probably owing to the operation having been done at an improper time, when the vein was in an inflamed and morbid state. As a general rule it is best to defer it till the ulcer has entirely healed and all the symptoms of inflammation have passed off. After the operation, a compress should be placed upon the part where the division is made, a roller applied from the foot to the middle of the thigh, and the limb kept in a state of entire rest in a horizontal position, till the wound has healed.—In dividing the vein, it is not necessary to avoid dividing the integuments above it, according to Sir Benjamin Brodie's plan.—It is in many cases very difficult to effect a division of the vein without dividing the integuments over it; and there is no evidence

that their division enhances the danger of the operation in any considerable degree.

Dr. Hayward's interesting and valuable paper concludes with a statement of the operations which were performed during the four months. They were twenty-four in number and all successful, so far as to enable the patients to leave the hospital.

ART. 8. *Cases of Strangulated Hernia, with Remarks.* By J. Mason Warren, M. D.—Two cases. The *first*, a strangulated femoral hernia, with a kunckle of intestine almost completely encysted by a fold of the omentum. The chief points of interest in this case, says Dr. W., are, 1st. The disappearance of a large hernial tumor, which for three years had been unrestrained by a truss, and its sudden return and immediate strangulation by the external ring, two years afterwards. 2d. The encysted state of the intestine, which was so completely concealed on the first opening of the sack, that it could not be exposed; and it was only after the protruded parts had been relieved by a free division of the stricture, that the omentum could be unfolded, and the intestine discovered through a small aperture at its posterior portion. 3d. The most interesting feature of the case was the formation of a large abscess, deep in the iliac region, which ten days after the operation, began to discharge itself through the external abdominal ring at the upper part of the wound. There was no reason to think that any portion of the omentum had become gangrenous; the pus was well formed, and in all probability was derived from a suppuration of the prolapsed omentum, which had been inflamed, partly by the strangulation it had been subjected to, and partly by the long continued and violent efforts of the patient to force it back into the abdomen. The operation resulted successfully.

The *second* case was one of scrotal hernia, in which the stricture was divided, and the hernia reduced, without opening the sack. This mode of operating which originated with Petit, Dr. W. considers decidedly the best that can be adopted in cases of strangulated hernia, and sees no reason why it should not always be attempted. The patient recovered, and the result of his case derives additional importance, Dr. W. thinks, from the startling

doctrine that has lately been advanced by Malgaigne, that the stricture is never caused, at least that this has never been proved to his satisfaction, by the tendinous openings of the abdomen, but almost always depends on an induration of the neck of the sack, occasioned by long continued pressure of a bandage. The present case, and others of a similar character performed by surgeons abroad whose accuracy cannot be questioned, prove that the strangulation may occasionally exist at the abdominal ring.

ART. 9. *Remarks on Iritis, chiefly from Observations at the Massachusetts Charitable Eye and Ear Infirmary, with cases.*—By George A. Bethune, M. D., one of the Assistant Surgeons.—

A valuable paper of twenty-nine pages, containing an examination, by means of the statistical system, of the causes, symptoms, and treatment of iritis. The results, says the author, are presented only as imperfect approximations to truth, and as liable to be set aside if contradicted hereafter by those of others, whose superior qualifications or more extended opportunities for observation may claim for them greater weight than his can be supposed to possess. The cases examined are twenty-eight in number.

To ascertain the frequency of iritis as compared with that of other diseases of the eye, the author examined the entries of patients applying at the infirmary during a period of nearly twelve years and five months. The whole number was 7121. The number of cases of iritis, not including those resulting from injury, was 112; of these, 12 are recorded as syphilitic; making the proportion of simple iritis to other ophthalmic diseases as one to 71, and that of syphilitic as about one to 593. These proportions are probably not very far from what would be found under similar circumstances, if a much larger number were taken.

The proportion of males to females in simple iritis was about 6 to 4. Only one of the patients was under ten years of age, and in this case the iritis was combined with disease of other textures. The pure uncomplicated affection is exceedingly rare among children. The oldest patient was 89; 7-9ths of the whole number were included between the ages of 20 and 40.

The *seasons* of the year and temperature appeared to exercise but little if any influence upon the occurrence of the disease.

The *rheumatic* character of certain cases of iritis may, in the opinion of some, be ascertained from the morbid appearances presented. Dr. B. has never been satisfied that this can be done with any tolerable certainty, and thinks that the only mode in which this form of the disease can be distinguished is by the occurrence of rheumatism in other parts of the body. One or more of his cases were manifestly allied to *struma*.

Causes.—In 29 cases, of which Dr. B. has notes, the causes of the disease are divided as follows: 15, unknown or not mentioned; 1, exposure to cold; 2, scrofula; 1, exposure at sea to unwholesome emanations; 5, rheumatism; 1, small pox; 1, vaccination; 2, scurvy. With more care, many other *supposed* causes might have been obtained; but some of those which are stated, he thinks, were nothing more than coincidences.

Comparative frequency of single and double iritis.—Of 24 patients none are noted as attacked simultaneously in both eyes.

Greater liability to attack of the right or left eye.—In 20 cases, the disease affected the right eye in 4, the left in 16; a singular disproportion, which may possibly have been accidental.

Symptoms.—1st. *Pain in and about the eyes.*—This, in 28 cases, was severe in 15; considerable in 8; slight in 4; not noticed in 1. *It was more severe at night* in 19; not more severe at night in 3; more severe in the day in 1; time of its greatest severity not mentioned in 5. 2d. *Loss of vision.*—This was great in 18 cases; considerable in 4; slight in 3; vision not affected in 1; not mentioned in 2. 3d. *Zone around the Cornea, or other sclerotic injection.*—This was probably almost always present, and is mentioned in 21 cases; not mentioned in 7.—4th. *Visible lymph in the pupil, or discoloration of the iris, giving to this membrane a darker hue than it naturally possesses, and which is usually considered as owing to the deposition of lymph upon the iris or in its texture.* This symptom was present in 27 cases; not present in 1 case. 5th. *Change in the pupil.*—Its *irregularity* is mentioned in 25 cases; not mentioned in 3. Its *contraction* is mentioned in 15 cases, not mentioned in 12. It was *dilated* in 1 case.

Treatment.—There are few diseases on the treatment of which

so general a unanimity of opinion is found among writers of experience. The usual course pursued at the infirmary has been, bleeding, general and local, in amount proportioned to the violence of the disease; purgatives usually saline, with *infus. senæ*, or the compound powder of jalap; calomel, united with a small quantity of opium to prevent its being carried off too soon by the bowels, and administered in doses of one or two grains, according to circumstances, at night, or night and morning, and continued till the gums are affected, if the disease be not manifestly checked before this effect is produced. Opium or Dover's powder was given freely for the nocturnal pain; blistering and the application of the stramonium extract were employed after the acute inflammation had subsided. Lotions seemed to have but little influence either on the progress of the disease, or in alleviating pain; warm, however, are generally more agreeable than cold, and are therefore to be preferred. Turpentine was rarely used, mercury being more relied on for fulfilling all the indications for which that medicine has been given.

Bleeding was employed generally or locally in 22 of the 28 cases. Of its influence on the disease, which Dr. B. has reason to think was very considerable, either from its own powers in subduing inflammation, or by preparing the system for the introduction of mercury, he has no means of giving an average approximation.

Mercury was exhibited in all the cases, and the gums were affected in 13. Three of the patients received little or no benefit to vision from its use. Two of these had the mouth made sore; one had not. The first had lymph in the pupil, which was probably organized; the second was of a highly scrofulous constitution; the third was evidently rheumatic. Rheumatism also occurred in three other cases, which were benefited by the remedy. Of the other patients, including twenty attacks, one was not seen after the first day of treatment; and one was not seen after the 3d day, when he had begun to improve. The remaining 18 were either well, or much improved and improving when last seen.— In six cases, the improvement of vision commenced within twenty-four hours after the mouth became affected; in one case,

within four days; and in one case, the patient reported the mercurial affection and the improvement as occurring together.

Dr. B. knows no remedy which can be safely substituted for mercury in iritis, even of a rheumatic character, when the pupil is filling up with deposited lymph; he has, however, far less confidence in its efficacy in these cases, than in others into which this element does not enter.

In iritis, and in other diseases of the eye, occurring in persons of a scrofulous constitution, he has often found great benefit from the use of mercury for a short time, but believes that it will not be found beneficial to carry it so far as to affect the system.

Turpentine was used in only one case. It was given in doses of a drachm three times a day, for two or three days, but without any obvious effect.

Opiates were freely used where they were indicated by the symptoms, and probably in some cases sustained the relief which was first effected by the bleeding.

Cathartics were usually given at the first visit, before the mercurial course was commenced, and were occasionally repeated when they seemed indicated.

Complications of the disease.—In 27 cases, there was slight corneitis in 5; severe corneitis in 5; corneitis with ectropium and inflamed lids in 1 case; severe conjunctivitis, with chemosis, in 1; effusion of pus into the anterior chamber (hypopium) in 1; slight corneitis with hypopium in 1; no complication in 13.

Sequelæ.—The most common is a change in the form of the pupil, which in many cases never resumes its original shape, though the vision may be nearly or perfectly restored. A frequent and very serious result is the formation of adhesion between the posterior surface of the iris and the capsule of the lens, which sometimes terminates in partial or total opacity of the capsule, or of the lens itself.

The residue of Dr. Bethune's paper consists of a detailed account of numerous cases, confirmatory of the opinions expressed in the part of his essay of which we have given an analysis.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.*

Vol. 26, No. 17, June 1, 1842.

ART. 1. *Clinical Lecture on Poisoning by Oxalic Acid.* By R. B. Todd, M. D., Professor of Anatomy in King's College, London. This paper is extracted from the London Lancet.

ART. 2. *Excision of a large Tumor from the Neck.* By R. D. Mussey, M. D., Professor of Surgery in the Medical College of Ohio. Extracted from the Western Lancet.

ART. 3. *Case of Hydrophobia.* By John Harrison, M. D., Professor in the Medical College of Ohio. From the Western Lancet.

ART. 4. *Case of Compound Commitented Fracture of the Jaw. Use of Wire Ligature.* Treated by A. B. Shipman, M. D.—Communicated by H. O. Jewett.—A compound fracture of the lower jaw. The extensive injury of the soft parts was thought an objection to the application of pasteboard and bandages according to the usual method. The depressed fragment of the bone was brought into apposition with the portions which retained their proper situation; and the teeth contiguous to the fracture being firm, a small wire was passed around those adjoining, and fastened so as firmly to retain the fragments. The wounds were then dressed with adhesive plasters, and a small compress applied under the chin, so as to support the lower jaw and keep it applied to the upper. A cathartic was administered, lotions of spirits and water occasionally applied, and such food permitted as could be taken without difficulty. The ensuing reaction was treated by blood-letting and cathartics. The ligatures were removed in about four weeks. In six weeks, the cure was complete, leaving no deformity.

ART. 5. *The Friends' Asylum for the Insane.*—Statistical and other information obtained from the twenty-fifth annual report of this excellent institution. The Asylum is near Philadelphia, and is under the care of Dr. Charles Evans as attending physician,

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and Dr. Pliny Earle as resident physician. A quarter of a century has passed since it was opened for the reception of patients, and of the eighteen asylums, exclusively for the insane, which are now in actual operation in the U. States, this is the most ancient, with the single exception of the one at Williamsburg, Virginia. The number of patients under care during the year ending June 1, 1842, has been 97. Of these 39 have been admitted, and 36 discharged; 3 have died; 13 were restored; 4 much improved; 10 improved; and 9 without improvement. Of the patients remaining in the asylum, 1 is restored; 6 much improved; 3 improved; and 48 without improvement. The average number during the year is $54\frac{1}{2}$, being less than reported last year, and a larger number of old chronic cases.

The proportion of cures in the 635 patients who have been admitted into the institution is 41.41 in every hundred. But if we deduct the 68 cases which at the time of admission had been deranged more than 10 years, and which included 24 who either were idiots or had been imbecile from puberty, also 7 cases complicated with epilepsy, and 6 which entered the institution with the paralysis peculiar to the insane, it leaves 554 cases properly subject to treatment, and of these the cures are in the proportion of 47.47 in every hundred. The per centage of cures in cases of less than a year's duration, taking the whole 25 years, is 57.10. Within the last ten years it has been much greater. Nearly all of those discharged as "much improved," were almost well; and in many instances, information was afterwards received of their perfect recovery. In the management of patients, the law of kindness and correct principles of physical and moral treatment have, in this asylum as elsewhere, superseded the employment of excessive corporeal restraint, coercion, and punishment. Manual employment still proves, as heretofore, the most effectual means for the promotion of cure in the curable, and for making those more comfortable and contented in whom the disease appears to have become permanently established. But, while this pre-eminence is accorded to useful labor, the evident utility of recreation and innocent amusement has not been overlooked. The garden, park, woods and fields in summer, the carpenter's and the basket ma-

ker's shop and a course of lectures on chemistry in winter; the library, circular rail-road, and horses and carriage, at all seasons of the year, afford adequate means both for occupation and pleasure.

In the act of Congress authorizing the census of 1840, it was ordered that returns should be made of the idiotic and insane in the several States which constitute the Union. This requisition was partially complied with, and it appears that there are in the United States of idiotic and insane whites 14,518, of whom 4,339 are supported at the public expense; and of colored people, 2,926, of whom 833 are supported in a similar manner. These returns probably exhibit not more than two-thirds of the actual number. It appears that the proportion of insane to the whole population is much greater in the long-settled states bordering on the Atlantic, than in those west of the Alleghany mountains which have more recently been peopled.

No. 18, JUNE 8, 1842.

ART. 1. *Nathaniel Chapman, M. D.*—An interesting sketch of the life and character of this distinguished practitioner and teacher of medicine, taken from the *Medical Examiner* of Philadelphia.

ART. 2. *Description of a case of Alveolar Abscess.* By Isaac J. Greenwood, M. D., D. D. S. From the *American Journal and Library of Dental Science*.

ART. 3. *Anomalous Result of an Operation for Stricture of the Urethra.* By E. H. Dixon, M. D., of New York.—The patient in this case had for two days suffered from retention of urine, caused by a debauch and exposure to cold, aggravating a permanent stricture of seven years' standing. He was a brewer and accustomed to drink from a quart to a gallon of beer daily. The bladder was greatly distended; expulsive pains were present, similar to those of labor; the pulse was full, unyielding, and varying in the intervals of pain. Neither catheter nor bougie could be passed into the bladder. To procure relief, the patient was bled *ad nauseam*, and tartar emetic was administered. These measures being unsuccessful, laudanum was given in a dose of gtt. c. every hour, with gtt. xxx of mur. tinct. of iron. This was continued five

hours, without the least benefit. The case demanding immediate relief, Dr. Dixon proceeded, with the assistance of Dr. Vandervoort, to perform the operation of cutting into the stricture. The patient was tied as for lithotomy, and a catheter being introduced down to the stricture, an incision was made through the perineum. Turning aside the bulb of the urethra, the point of the catheter was exposed above the stricture. A cautious incision was made from the point of the catheter, in a direct line with that instrument and the raphe of the perineum, upon the vesical portion of the urethra. This evidently incised the stricture, for there was a rapid gush of urine, amounting, as near as could be judged, to half a pint. On withdrawing the catheter, the operator was astonished to find a full stream of urine passing through the penis. After an ineffectual attempt to discover the opening of the urethra nearest to the bladder, a pledget of lint was inserted in the wound, and the patient being placed on his side spent a good night. On the following morning, it was found that he had passed urine with perfect freedom through the penis, and that none had issued through the wound. The pledget of lint was removed; the case progressed to a cure without an unfavourable symptom; not a drop of urine issued at any time through the perineum; the largest catheter will now pass freely into the bladder, and the patient passes a full stream of urine, not only when temperate, but during his customary debauches.

The stricture in this case Dr. Dixon believes to have been permanent and not spasmodic. The successful result of his operation he considers wholly inexplicable. He publishes it, because he thinks that we are all too much in the habit of setting forth our smooth cases, to the exclusion of such as may possibly manifest our dulness.

ART. 4. *Insanity and Death from Masturbation.* By Alfred Hitchcock, M. D., Ashby, Mass.—Dr. H. states, that within ten years a number of fatal cases of the evil habit in question have fallen under his observation, where death was clearly traceable to that cause alone. Of these, one of the most important and interesting is detailed in the present communication. The patient's death, which occurred in his 23d year, was preceded by a single

attack of epilepsy and by insanity. A *post mortem* examination of his body is given.

ART. 5. *Traumatic Tetanus treated by free Bleeding.* By Dr. C. C. Higgins, of Staffordshire. From the *London Lancet*.

No. 19, JUNE 15, 1842.

ART. 1. *Climate, Diseases, &c., of Western Africa.* From the *Journal of Dr. Savage, Missionary at Cape Palmas*.—An evident cause of endemic disease at Cape Coast, according to Dr. S., lies in the stagnant pools within the native town, and the filthy habits of its inhabitants. Among the peculiar local diseases are the *guinea-worm* and *elephant-leg*, both of which are known in almost every part of the Gold Coast. Of the *guinea-worm* the common account is given. Respecting the mode in which this parasite finds admission into the human body, various opinions have been entertained: Dr. S. says that but little difficulty upon this subject will occur to the mind of an observer who, like himself, has seen men, women, and children bathing in pools of water green and evidently malignant from stagnation, and which the natives often use for drinking and culinary purposes. He has discovered two of the worms, about two lines in length, in a tumbler of water, which, upon examination by the microscope, proved to be true *filiariæ*. When of full growth, their length varies from two to six feet.

The other affection, the *elephant-leg*, Dr. S. states to be probably the result of neglected or badly treated intermittent fever.—At the recurrence of almost every febrile paroxysm, the effusion increases; the disease soon becomes chronic, and no relief can be found for it but in the grave. Dr. S. is correct in asserting it to be a totally different disease from elephantiasis of the Greeks, with which it has been erroneously confounded. The two maladies are often mentioned by the same name; but the elephantiasis of the Arabian writers,—the *elephant-leg* of which Dr. Savage speaks,—is a mere local affection, and incapable of being transmitted from one person to another; while the elephantiasis of the Greeks, the *elephant-skin* is a constitutional disease, always hereditary, and frequently contagious.

ART. 2. *Convulsions consequent upon Dentition treated by the application of Ice to the Spine. Part of a Clinical Lecture by R. B. Todd, M. D., F. R. S. From the London Lancet.*—The first and main point which we have to decide when called to a case of convulsions is their cause. They cannot occur without some affection of the medulla oblongata or spinal cord, direct or indirect. They may be caused by direct irritation of the nervous centre itself, as we know often happens in children from tubercular disease, and in adults also from meningeal disease. But the irritation of the nervous centre may result from some distant irritation propagated to it by an excitor nerve; and in children, infants especially, this is most commonly the case. The excitement occasioned by teeth slowly making their way through the gums, or by some derangement of the stomach or bowels, not unfrequently reacts on the nervous centres, exciting an irritation there which proclaims itself by giving rise to convulsions. Dentition so often excites convulsion in infants that the practitioner would be guilty of an unpardonable oversight who did not first carefully examine the gums to ascertain whether any teeth were struggling to come forward, and if so, to divide the membrane which retarded their progress. And in performing this operation, we must not be content with a simple incision of the gum, but must take care to divide it freely, so as to cut through all the coverings of the tooth, and thus to remove every obstacle to its protrusion.

In the case of an infant, aged 18 months, which is detailed in the present paper, the gums were freely scarified, and, with the view of removing any irritating matter which might have accumulated in the bowels, an enema was administered, consisting of four ounces of gruel and two drachms of spirit of turpentine.—These measures being ineffectual, cold sponging of the head was next tried, and two leeches were applied to the right temple.—The case was but little improved; consciousness had not returned; the muscles of one side of the body were affected by convulsive twitching; those of the other side remained powerfully flexed, and could not be extended. At this time, which was five hours from the commencement of the fit, it was determined to adopt the expedient which had not long before produced marked effects in a

case of hydrophobia, namely, the application of ice along the back of the neck and spine, with a view of calming, by the sedative agency of cold, the irritable state of the cerebro-spinal axis. Ice was applied in an ox-gullet, along the course of the spine, extending from the occiput to the sacrum. The happiest results followed. Immediately on the application, the breathing became easier, the child sighed several times, the pulse fell rapidly, and in ten minutes the convulsions had entirely ceased. Next morning the child was quite conscious, but irritable; he was freely purged with a little calomel and jalap, and left the hospital quite well on the fourth day from his admission.

The application of ice to the region of the irritated nervous centres Dr. Todd thinks would not have been good practice, if the original irritant had not been removed or diminished, by cutting the gums and evacuating the bowels. With regard to the leeching, he holds it to be a general rule that depletion in convulsive affections is injurious; it tends to impoverish the blood, and to render the system more susceptible to irritating influences; it is only admissible where there is decided indication of inflammatory action. The warm bath is a popular remedy, which he thinks, is almost always used empirically, and without any definite object. Sometimes it seems to soothe the patient; at other times, and he thinks more frequently, it either does no good, or does positive mischief by relaxing and weakening. It is, however, an expedient which may now and then be tried with benefit; in such cases it possibly acts by soothing the external sentient surface, whence the calming influence is communicated to the centres.

ART. 3. *Secale Cornutum.* From the *Western Lancet*.

ART. 4. *External or Superficial Caries of the Teeth.* From the *American Library of Dental Science*.

ART. 5. *Case of Retrocedent Mumps, with Hemiplegia and Coma.—Recovery.* By Alfred Hitchcock, M. D., Ashby, Mass. Ten days after the commencement of a severe attack of parotitis, and when the patient was apparently recovering from that disease, symptoms of cerebral disturbance occurred, which gradu-

ally produced coma, convulsions, and paralysis of the right arm and leg. The treatment consisted of the application of sinapisms to the parotid glands and to the extremities; blisters to the neck and scalp; Granville's lotion to the epigastrium; tea spoonful doses of ol. terebinth. every ten minutes for an hour, as a stimulant; the use of calomel, in doses of three grains, every four or five hours, till the gums were affected; morphia to control the bowels, and allay spasmodic symptoms; and, finally, ether, ammonia, quinine, and brandy. The patient gradually recovered.

No. 20, JUNE 22, 1842.

ART. 1. *Medical Statistics of the U. S. ship Constellation, on her present voyage.* By J. H. Wright, Assistant Surgeon, U. S. Navy.—A crew of 375 men, including officers, was received on board the Constellation, then moored off the Navy Yard, Boston, on the 26th of October, 1840. Of these, thirteen were condemned as unfit for the cruise, on account of feeble constitutions or special morbid predispositions, and transferred to the Columbus.—The Constellation sailed from Boston, December 9th, and reached Rio de Janeiro on the 25th of January, 1841. After leaving this port she was never at sea more than 28 days at a time, anchoring first in Table Bay, and soon after in Saldanha Bay, where she remained nearly three months, undergoing repairs. The rest of the voyage was through the Mozambique channel, to Johanna, off the Coast of Sumatra, and to Singapore, from which latter place the present communication was written in January, 1842. During the year ending October, 1841, 727 cases were admitted on the sick-list. Colds, diarrhœas, and dysenteries, rheumatisms and injuries constitute nearly two-thirds of the cases. Some points in the medical police of the ship are mentioned as worthy of notice. In cleaning the deck, dry holy stones alone were used. White-wash was employed scantily, a departure from the usual routine, which Dr. W. believes to have had an important effect in preventing dampness in the lower parts of the ship. In order to keep up the action of the skin, in addition to the use of flannel, strict measures were adopted, at sea and in port, to prevent the practice of sleeping in currents of air. The awnings were

tented at night, and the ports shut in close; the variation of temperature during the night was thus obviated.

ART. 2. *Observations on Influenza.* By Job Wilson, of Franklin, N. H.—Influenza has prevailed in North America in A. D. 1733, 1737, 1747, 1757, 1761, 1772, 1781, 1789, 1790, 1807, 1815, 1822, 1831, 1837, and 1841. In all the above years, as far as the author has been able to ascertain, the weather was remarkably variable. To this circumstance, Dr. W. thinks the prevalence of the disease is to be attributed. The human system, he says, has a power to resist changes of temperature and other hurtful causes to a certain degree, which is sometimes more and at other times less; consequently a single change of temperature does not often debilitate the capillary vessels so far as to produce serious disease, and in general it requires a series of changes to reduce the inherent energy of those vessels, and thereby prepare the population of a place for an epidemic. Dr. Holland, in his *Medical Notes*, maintains, that the known conditions of the atmosphere, as we estimate them by our instruments, are inadequate to explain the occurrence of influenza. In support of this opinion, he urges, first, that obvious conditions of the weather being the same in a certain number of places, the disease appears in them at very different times, or in some not at all; and, secondly, that it occurs in various places, or in different years at the same place, under states of season and weather wholly opposite to each other. To these objections Dr. Wilson replies, first, that all inquiry into the subject shows that places in the same vicinity vary considerably in temperature, which may be occasioned by their greater or less elevation, or their having a northern or southern declivity, or being more or less exposed to a strong current of air or fog, or having a dry soil, or a soil that is moist and steaming; and, secondly, that the system, when reduced and enervated, does not immediately recover its tone, and consequently a disease may continue under the operation of a cause less powerful than the one which produced it, and in a state of the weather very different from that in which it commenced.

No. 21, JUNE 29, 1842.

ART. 1. *Scarlet Fever.—Cases and Remarks.* By Daniel Gil-

bert, M. D., Fellow of the New Hampshire and Vermont Medical Societies.—Scarlet Fever has for the last twelve years been very prevalent in Brattleboro', Vt., where Dr. Gilbert resides, and the Doctor appears to have been extensively engaged in its treatment. During the year ending on the 28th of December, 1830, he observed and treated 548 well defined cases. Of this number, 108 were considered mild, and 259 severe in their first stage. Of the whole number, 7 were fatal.

In all the cases that came under Dr. G.'s observation, the recuperative forces of the system rallied once. This was the most important period of the whole affection. It was only at this stage of excitation that disasters could with certainty be averted; the morbid phenomena which then occurred, if not promptly controlled, were certain to be followed by rapid prostration. The effect of sufficient *blood-letting*, in this stage, was truly wonderful. It subdued the morbid action in such a manner as effectually to prevent the depression of the vital forces which necessarily ensues after excessive action. Cases of the most threatening aspect would, after blood-letting, promptly assume the mildest form, and require no other treatment but a slight impression of belladonna to keep down the irritability of the system, an occasional purgative of ol. ricini, rest, and a liquid, farinaceous diet. In no case that was treated in this manner, in the early stage, was there ulceration or sloughing in the mouth or throat. Secondary affections were rare, and when they occurred could be clearly traced to bad management in diet, or some kind of over-excitement.

Dr. G. strongly condemns the stimulating treatment recommended by some authors, which he considers equally objectionable with the old method in surgery of treating compound fractures by attempting to promote sloughing, and assist nature to effect ulceration.

Coldness of the lower extremities was a remarkable phenomenon, for the first one or two days, in the cases which he saw. The use of stimulants to remove this condition had a bad effect, and he was never prevented by its presence from resorting to blood-letting where the period of excitation had commenced. (*To be continued.*)

ART. 2. *A Singular Case.* By Levi Aldrich, Shrewsbury, Vt. A patient suffering from excruciating pain in the head, mostly located over the right orbit, was relieved by a sudden gush of apparently clear water from the right nostril. This continued to drop as often as every third breath, and sometimes oftener, for 24 days. She was then attacked by pneumonitis, and the dropping ceased; but no sooner were the pneumonic difficulties mitigated, than it returned, and continued till her death, which was caused by hydrothorax.

ART. 3. *New Method of applying the Ligature for Prolapsus Ani.* By E. H. Dixon, M. D., of New York.—With a large suture-needle, having a curve equal to one-third of a circle two inches in diameter, and with a lancet point, for no other will penetrate, a very strong *double* ligature, *untwisted*, is to be passed from the circumference of the diseased verge on one side, at least half an inch deep, through the gut, to the other side; then, having a similar needle armed in like manner, another ligature is to be passed intersecting the first one at the centre of the anus. The subsequent part of the operation is to draw out, either with a finger or a bent probe, the ligatures at their point of intersection in the anus, cut them in two and tie them firmly, one from each quarter with its opposite. Four knots being thus tied on the inside of the intestine, four more are to be tied in the same manner on the outside, with all the strength of your fingers, the ligatures being previously well waxed that they may not slip. This process necessarily strangulates every particle of the disease. Much pain may be saved the patient by tying the ligatures with great strength, so as to destroy the vitality of the diseased part at once. The bowels should be evacuated with senna tea the day before the operation; opium should then be given, and the patient, during the separation of the affected part, should use only farinaceous diet. A pill of belladonna, occasionally introduced far up the rectum, greatly alleviates the annoyance. The parts usually separate on the fifth or sixth day.

ART. 4. *Of Internal or Deep-Seated Caries of the Teeth.*—From the American Journal and Library of Dental Science.

No. 22, JULY 6, 1842.

ART. 1. *Clinical Lecture on Incipient Phthisis.* By John Clendenning, M. D., F. R. S., &c. From the London Lancet.

ART. 2. *Entire Division of the Masseter Muscle, for Rigidity of the Jaw.* By J. W. Schmidt, M. D., New York.—The patient had labored for more than twelve years under inability to open her mouth, owing to a contraction and rigidity of one of the masseter muscles, which was caused by an extensively ulcerated throat when a child. The end of the little finger could not be inserted between the upper and lower incisors, and the jaw was also much drawn to one side.

For the relief of this inconvenience and deformity, Dr. S., in October, 1841, passed a narrow bistoury through the mucous membrane of the mouth, immediately in front of the anterior edge of the masseter muscle, about on a line with the alveolar processes of the lower jaw. Holding the integuments up from the muscle with one hand, the bistoury was passed over the masseter, between it and the integuments, and the muscle completely divided to the bone. The mouth was immediately opened to the usual size, and the lateral distortion of the jaw much improved. To prevent union of the muscle as before, pieces of soft wood, wedge-shaped, were kept in the mouth during the night, and occasionally during the day. Dr. S. is not aware that the entire division of the masseter on the subcutaneous principle has ever before been performed.

ART. 3. *Medical Testimony.*—A farther communication from Dr. Shipman, of Cortlandville, N. Y., containing the depositions of Drs. Van Duzen and Carpenter, in relation to the litigated case of fractured limb in Cortlandville. This subject has given occasion to a pamphlet, sundry publications in the Boston Medical and Surgical Journal, and an ample amount of ill-feeling among the medical men concerned. "With a most complying desire," says the editor of the Journal, "to accommodate both parties and set the public mind right, we are worse off now than in the beginning of the controversy. We can truly say, that we wish Smith had never broken his leg." In this charitable sentiment we cordially concur.

ART. 4. *Asylum for the Insane in Pennsylvania*.—A report on the progress of the building of the new Asylum, made, in obedience to a resolution of the Legislature, by William Strickland, Esq., the architect of the work. The foundations are laid on the west side of the river Schuylkill, between Gray's Ferry and Carr's Gardens, and between the Philadelphia and Baltimore Rail Road and the Darby road. The paper contains an account of the plan and arrangements of the intended structure.

ART. 5. *New Hampshire Medical Society*.—A letter from Jas. B. Abbott, Secretary, stating the anniversary meeting of the society in Concord, on the 31st of May last. Two interesting dissertations were listened to by the members and other literary gentlemen present; one from Professor Crosby, of Hanover, on hernia, its surgical anatomy and treatment; the other from Dr. Savory, of Hopkinton, upon the present condition of medicine as a science and a profession. "I notice," says the writer, "in the account given in your Journal of the meeting of the Massachusetts' Medical Society, that wine was excluded from its tables.—This is as it should be, and worthy to be imitated by all medical associations. New Hampshire, however, is a little in advance upon this point. I think it is more than ten years since ardent spirit and wine were banished from the board of the New Hampshire Medical Society."

ART. 6. *Hartford Retreat for the Insane*.—*Eighteenth Annual Report*. *An extract*.—The number of patients at the beginning of the year, was 83; admitted during the year, 96; total, 179.—Discharged, as recovered, 56; improved, 16; not improved, 9; dead, 8; remaining in the Retreat, 90.

No. 23, JULY 13, 1842.

ART. 1. *Ramolissement of the Brain*. By William Alexander, M. D. From the London Lancet.

ART. 2. *The late Dr. Holbrook*. From the Boston Courier.—An account of the life and character of Dr. H.

ART. 3. *On the employment of the Chloride of Zinc as an Escharotic*. By Alfred McClintock, Esq. From the Dublin Journal of Medical Sciences.

ART. 4. *Remarks on Scarlet Fever.* By Dr. Daniel Gilbert. *Continued from a No. of the Journal published before the commencement of our analysis.*—The present paper refers to the treatment of the disease. “The expectant treatment,” says Dr. G., “should never be relied upon in subjects of exalted nervous, plethoric, and phlegmatic temperaments, however young the patients, or mild the symptoms in the beginning. The active method of diminishing the local affection should be resorted to with various force, according to the age, habit, &c. The object is to promote resolution, and if the early opportunity is neglected in those peculiar temperaments, we may find it too late.”

ART. 5. *Treatment of Renal Dropsy.* By Dr. R. Day.—*From the London Lancet.*

No. 24, JULY 20, 1842.

ART. 1. *Case of numerous incised wounds.* By P. J. Bauduy, of Cuba. *From the Medical Examiner.*

ART. 2. *Two Cases of Inversion of the Uterus.* By W. L. Sutton, M. D., of Georgetown, Ky. *From the American Journal of Medical Sciences.*

ART. 3. *Case of Extravasation of Blood into the Cellular Texture beneath the skin of the Penis.* By Edward Jarvis, M. D., Louisville, Ky. *From the Amer. Journal of Med. Sciences.*

ART. 4. *Pregnancy without Signs.—Labor without Pains.*—A case read before the Medical and Chirurgical Society of London, by Dr. C. J. B. Williams. *From the London Lancet.*

ART. 5. *Abstinence and Repletion.* By John Taylor, of Brompton, Eng. *From the London Lancet.*

ART. 6. *General Deportment of Physicians.*—An extract from a discourse before the Monroe County Medical Society, N. Y., delivered at Rochester, May 11, 1842, by Maltby Strong, M. D., President.

No. 25, JULY 27, 1842.

ART. 1. *Medical Treatment of Insanity.* By A. Brigham, M. D., Superintendent of the Hartford Retreat for the Insane.—*Extracted from the Annual Report.*—In the Hartford Retreat, general bleeding is very rarely used in the treatment of insanity. Topical bleeding is occasionally employed where there is much

cerebral excitement, but even in such cases more benefit is generally derived from placing the feet in warm water, applying cold to the head, and exciting free movement of the bowels. Bathing in warm water is found useful. Opium has always been employed, and often with great success. In a few cases it appears to be injurious, particularly where the skin is hot and dry, and the pulse full and hard. It rarely cures the disease, but by its calming powers is a valuable adjuvant to other remedies. Dr. Pritchard, who in the first edition of his work on insanity speaks disparagingly of its use, states in a later publication, that "there are few disorders in which so much benefit is derived from this remedy, as in cases of insanity." Where tonics are required, as frequently happens in cases of some months' continuance, no preparation is so generally prescribed as the following;—*R.* ext. conii ℥ vj, ferri carb. precip. ℥ xij, molasses, wine, warm water āā qts. ij, ol. gaultheriæ or ol. sassafras ℥ ij, dissolved in alcohol ℥ viij, *M.* Usual dose, ℥ ss—sometimes more: if a laxative effect is wanted, one or two drachms of tinct. aloes et myrrhæ are added to each dose.

ART. 2. *Total Abstinence from Alcoholic Fluids.* By Dr. T. Beaumont, of Yorkshire. From the London Lancet.—A reply to previous remarks in the same Journal by Dr. Clutterbuck, advocating the use of a generous diet, and a moderate indulgence in spirituous liquors.

ART. 3. *Case of Lithotomy.* By H. O. Jewett.—Operation performed successfully in May, 1842. A case in no respects remarkable.

ART. 4. *Studies in Pathology.* By Dr. C. R. Gilman. From the New York Medical Gazette.

AMERICAN JOURNAL OF THE MEDICAL SCIENCES.*

New Series, No. 7, July, 1842.

ART. 1. *Experiments on Kiesteine, with Observations on its application to the diagnosis of Pregnancy.* By Elisha K. Kane, M. D. From p. 13 to p. 38.

The principal writers on Kiesteine as a test of pregnancy before Dr. Kane completed his experiments were M. Nauche in 1831; M. Eguisier, in 1839; Dr. Golding Bird, in 1840; M. Becquerel, in 1841; and, in our own country, Drs. McPheeters and Perry, resident Physicians at the Philadelphia Hospital, also in 1841.

Dr. Kane's observations, like those of Drs. McPheeters and Perry, were made at the Philadelphia Hospital. The number of patients in the several wards was such as to make it easy to classify and group the cases. The following method was pursued:—

“My mode of conducting the experiments was this. The recent urine was placed in open glass cylinders, of diameters varying from an inch and a half to that of a common tumbler, and protected from dust by paper covers. These were arranged in a dry, well ventilated room, where the temperature was uniform and moderate, and were exposed in groups to the equal action of air and light.† I examined them frequently during the day; but as the changes were not rapid, I determined after a little while to note only one set of observations in the twenty-four hours. My notes were always made upon the spot. If from any cause, an individual observation or a series was unsatisfactory, or inconclusive; or if it led to a different result from others, I repeated it at once with increased care; and I was always careful to observe the constitution, habits and circumstances generally of each patient.

“The urine, submitted to observation in the way I have described, presents but little change during the first thirty-six hours. The mucous flocculi, if they exist, gradually subside during this period, forming a whitish cloud-like deposite at the

*Edited by Isaac Hays, M. D., Surgeon to Wills' Hospital, Physician to the Philadelphia Orphan Asylum, &c. &c. Published Quarterly, pp. 260. Price Five Dollars per annum.

†These precautions were not unimportant. My attempts in the “Green Room of the Hospital” were unsuccessful, in consequence of the dampness producing fungoid modifications of the scum; and in very cold or very hot weather, the pellicle formed very reluctantly, or was anticipated by the decomposition of the urine. The room should be sufficiently lighted to admit of minute examination, and the specimen should be kept *absolutely at rest* during the progress of the inquiry.

bottom and sometimes on the sides of the glass ; while more or less alteration occurs in the colour and transparency of the fluid.

“The surface remains for a short time entirely unchanged ; but in most cases, a greater or less number of shining acicular specks, apparently crystalline, begins to be seen within the first eighteen or twenty-four hours. These are generally scattered over the surface without regularity ; but in some rare cases, they are so disposed as to form a translucent film of uniform thickness, which afterwards assumes the more defined characters of the pellicle. How far these crystals are essentially connected with the formation of the pellicle, I am not prepared to say. In many cases, I have not succeeded in detecting their presence, even by the microscope ; and, indeed, I have failed to discover any *unvarying* indications whatever of the approaching development of the Kiesteine.

“The cloudlike appearance, which is alluded to by Nauche and Eguisier, although possessed of much interest, I have not found to be a uniform premonitor of the forming pellicle ; I have supposed it to be nothing more than the Enæorema of the older writers, depending upon the imperfect aggregation of mucous flocculi ; for I have seen it repeatedly when there was no pregnancy to account for it, and it was uniformly absent where the fluid presented perfect transparency.

“The time at which the pellicle begins to form varies considerably. I have seen it well marked at the end of thirty-six hours, and have known it make its first appearance as late as the eighth day. At first, it is hardly discernible. It is generally seen forming at the centre or on the sides of the glass, presenting a delicate milky or bluish white aspect. It is however in some cases uniformly disposed over the surface from the commencement, and assumes the appearance of a nearly transparent film, which gradually becomes more distinct. But it has not always the continuous strongly marked character, which some have ascribed to it. I have seen it begin in striated irregular lines, somewhat resembling a spider’s web, in rings, circles, trapeziums, and irregular figures of almost every shape, which gradually became obscured by the full development of the pellicle.

“When it has attained this stage, which occurs generally about the fifth day, it presents a continuous scum of an opaline white or creamy appearance, with a slight tinge of yellow, which gradually becomes deeper and more decided. The uniformity of this colour, however, is generally broken by granulated spots of a clearer white, giving it a dotted or roughened aspect. The crystals of the forming stage now appear like shining points, and I have sometimes found numerous small brownish specks, sprinkled over the surface, not unlike the gratings of nutmeg.—It is at this period, that the pellicle may be compared “to the fatty scum of cooled broth.”

“In this state it continues for some time, preserving all its characters unbroken. The glass, where the surface meets it, is discoloured by a white opaline ring ; and a series of such rings, varying in extent from a line to the fourth of an inch, marks the descent of the surface during the progress of evaporation.

“The cheesy odour, mentioned by Dr. Bird as a valuable aid in diagnosis, and as “by no means unfrequent in those specimens in which the pellicle is very thick,” I have found in but seven cases. Many pellicles of great thickness were entirely without it ; and in two of those presenting it, the pellicle was thin and not very well developed. Drs. McPheeters and Perry were unable to detect it in

either of the twenty-seven cases examined by them, and I have found it unequivocally developed in at least three cases in which pregnancy did not exist.

"The pellicle, if left undisturbed for some days, breaks into cracks, commencing generally from the central portions, but not always extending to the edge of the glass. These are again crossed by other fissures, and the pellicle is more or less broken up. In the mean time, the flakes, which have been forming from the commencement of disintegration, have their edges depressed into the fluid, while at the same time the general thickness of the pellicle is much diminished; and this depression or dip gradually increasing, the depending particle is detached, and sinks slowly to the bottom. Its complete disintegration, however, is but seldom seen; being anticipated by the decomposition of the fluid. The deposit is of course considerably increased by the fallen portions of the pellicle, and is found irregularly disposed over the bottom of the vessel; but as I have remarked, most abundant on the side farthest from the light.

"I cannot agree with those who consider this deposit as presenting well marked distinctive characters to the eye, and I certainly have not found it uniformly coincident with the approach of the pellicle. It has indeed in many cases been absent at that period; and in others, until augmented by the detached pellicle, I have been unable to distinguish it from the very many deposits found in other urine. How far a chemical investigation may give it value, I am not prepared to say: although its liability to be confounded with other sediments makes it practically unavailable as a test, it offers a fine field for microscopic and chemical research.

"This description of the appearances and changes of the pellicle, though more detailed than those of Nauche and his followers, still applies only to the better defined examples. In a considerable proportion of cases, some of the phases mentioned are not to be found together; and I have not been able by the most careful observation to discover the causes of variance. This I allude to here, because the absolute and unqualified language, which I have met elsewhere upon the subject, seems to me calculated to mislead the unpractised inquirer.

"It must not however be inferred that the presence of kiesteine is determinable only by vague and undefined characteristics. On the contrary, the tables which are appended to this dissertation, will show that they are as well defined as most pathological phenomena, though like them they sometimes require for their discrimination a practised comparative scrutiny."

Dr. K. made observations on the urine of 85 pregnant women. Of these, 68 gave a well marked pellicle of the sort called kiesteinic; 11 gave the pellicle under a modified form; and 6 gave no pellicle whatever.

He also made observations on the urine of 94 females, in a state of lactation. 42 were without any kiesteine; 8 presented a scum, imperfectly formed; and 44 had the perfect kiesteinic pellicle.

He examined 28 cases of unimpregnated females, in a perfectly healthy condition. In some of these, pellicles formed on the

urine, but the distinctive character of the kiesteine was absent in every case.

The pellicle, not unfrequently seen on the urine in the last stages of phthisis, in arthritic diseases, and in cases of metastatic abscess, vesical catarrh, and uterine tumors, Dr. K. says, has points of resemblance which might readily mislead the unpractised.

Dr. K. closes his paper with the following general remarks:—

“It may be proper that I should close this paper by some remarks on the value of the kiesteine as a diagnostic of pregnancy. I do so with diffidence, for my opinions are not sustained by the judgment of the more experienced observers who have preceded me.

“I cannot regard the kiesteine as an *unerring* test of pregnancy. I have already shown that it is present under other conditions of the system; and even where pregnancy exists, I am satisfied that this indication is not always observable.

“I am convinced too, that the kiesteine is not always distinguishable from other pellicles which appear on the surface of the urine. At least, I am bound to say, that, in the absence of other indications, I should sometimes have found myself unable to distinguish between them. Not that they are generally liable to be confounded; but between the imperfectly developed pellicle of the one character, and the best simulation of it which is sometimes presented by others, the distinction is too slight to be satisfactory or unfailing.

“But with the qualifications which these remarks imply, I have no doubt that the pellicle which has been denominated kiesteine is *among the best*, if indeed it be not *the most certain*, of the earlier indications of pregnancy. I resorted to it habitually in my diagnosis in the obstetric wards of our hospital, and with constantly increasing confidence.

“In one case, I felt myself at liberty to direct the removal of a patient to the working ward, who claimed the privileges of pregnancy in round terms, and presented all the other symptoms of that state in confirmation of her pretensions.—She still retains the suspended catamenia, enlarged abdomen, &c., though five months have elapsed since the birth of the infant was promised me as a proof of my mistake. Other cases of attempted imposture, some of them ludicrous enough, which were detected by the same means, I have collected in my table C.

“My associates at the hospital have not unfrequently amused themselves by presenting for my inspection, the urinary excretions of all sorts of patients, and in many varieties of combination. I believe they will bear me witness, that my reliance on the kiesteinic test has not misled me.

“Indeed, the cases which I have referred to, and which are arranged in series in the accompanying tables, must satisfy an unprejudiced mind, that there is something well worthy of the obstetrician’s study in the pellicles presented by the urine during utero-gestation.

The result of my observations may be summed up in the following general conclusions:

"1. That the kiesteine is not peculiar to pregnancy, but may occur whenever the lacteal elements are secreted without a free discharge at the mammæ.

"2. That though sometimes obscurely developed and occasionally simulated by other pellicles, it is generally distinguishable from all others.

"3. That where pregnancy is possible, the exhibition of a clearly defined kiesteinic pellicle, is one of the least equivocal proofs of that condition; and

"4. That when this pellicle is not found in the more advanced stages of supposed pregnancy, the probabilities, if the female be otherwise healthy, are as 20 to 1 (81 to 4) that the prognosis is incorrect."

ART. 2. *Case of complete Anchylosis—in which the knee-joint was permanently flexed—cured by an operation.* By William Gibson, M. D., Professor of Surgery in the University of Pennsylvania.—Reported by Thomas L. Walker, M. D., of Albemarle, Virginia, one of the Resident Physicians at the Philadelphia Hospital.—Dr. J. Rhea Barton devised a new treatment for the relief of anchylosis, at the hip-joint, and at the knee. In the North American Medical and Surgical Journal, for April, 1827, he reported his first operation; and he reported another in the American Journal of the Medical Sciences, for Feb. 1838. The latter case and the one under the care of Dr. Gibson are almost identical. The following particulars are from Dr. Walker's report.

James Johnson, colored, æt. 17, whilst cutting with an axe, inflicted upon his right knee a wound. He recovered with a loss of the joint; and with the leg flexed backwards toward the thigh, forming an angle much less than a right angle. A careful examination satisfied Dr. Gibson, that the parts belonging to the joint were all destroyed,—ligaments, cartilages, and the synovial membranes; and that it was a case of complete anchylosis. Dr. G. did not think that circumstances justified his attempting the double indication of forming a false joint and extending the limb too. His only aim therefore was to correct its mal-position.

Nov. 17th, 1841. Two incisions were made, as in the operation of Dr. Barton; the first extending from the outer to the inner side of the limb, and passing immediately above the patella; the second commencing on the outer side, two and a half inches above the first, and meeting it at an acute angle on the inner side.—These incisions penetrated to the bone, engaging the integuments, the tendon of the extensor muscles, and some of their fibres. The soft parts included between the incisions being dis-

sected off and turned back, the bone was exposed to view. A portion of the femur, of a wedge shape, was then removed with the saw, having a base upwards of two inches and a half anteriorly, and reaching to within a few lines of the posterior surface of the bone. The operation was then concluded by inclining the leg backwards, which caused that portion of the bone's diameter, undivided by the saw, readily to yield, and the solution of continuity to be made complete. This method of separating the bone, was regarded as important; inasmuch as it guarded the popliteal artery against wounds from the saw; and the dove-tailed edges of the opposed surfaces were influential in fixing the extremities of the bones, until the asperities of these surfaces were removed by absorption, or by the formation of new matter.

Dr. Walker details the treatment of the case from the time of the operation until January 26th, when the patient was able to walk with the aid of crutches. His report then concludes with the following observations.

Feb. 15th. Wound every where closed. Could bear the weight of his body with difficulty. The leg shortened nearly an inch. Walked without the enclosure, assisted by crutches.—General health perfect.

May 1st. For the last two months the patient has walked about continually without the use of a crutch or a stick; and latterly has been twice to town and back on foot,—having walked three or four miles without the slightest inconvenience. The knee at this time is only half an inch shorter than the other.

ART. 3. *Practical Observations on those Malformations of the Male Urethra and Penis, termed Hypospadias, and Epispadias, with an Anomalous case.* By John P. Mettauer, M. D., of Prince Edward County, Va. From p. 43 to p. 57.—To remedy these malformations, Dr. M. passes a small trocar into the anormal opening, thence along the tract usually pursued by the urethra, to the extremity of the glans. An elastic tube is then introduced through this passage into the urethra and properly secured at its head. It should remain there until free suppuration is established. A short bougie may next be used for half an hour at a time, three or four times daily, until the part ceases to matter; it should

then be introduced once or twice daily until the passage is firmly established. The fistulous opening may be touched with nitras argenti, and the slough scraped off with a knife, before the passage is restored, or afterwards. The surfaces thus denuded will readily unite as a fresh cut, or by granulations. Occasionally it is necessary to use adhesive plasters, or a bandage to approximate the margins of the opening.

Dr. M. gives the particulars of a case of a mal-formed penis, and of an operation for improving it. In this operation a part of the penis, which was non-erectile, was excised, and the glans was transferred to the erectile stump where it became attached.—Three months from the date of this operation, a second operation was performed for the removal of the tegumentary intermedium, which had formed an unsightly fold.

ART. 4. *Cases of Disease of the Brain and Spinal Marrow.*—By James McNaughton, M. D., Professor of Theory and Practice of Medicine in the Albany Medical College.

ART. 5. *Cases of Deformity from Burns, relieved by Operation.* By Thomas D. Mütter, M. D., Prof. of Surg. in Jefferson Med. Col., Phil., &c. From p. 66 to p. 80—This valuable paper contains a lucid description of operations, in three cases of revolting deformity of the face and throat, with a result in each case highly creditable to the judgment and skill of Professor Mütter. His remarks on the peculiarities of cicatrices resulting from burns, and the plans of treatment, by which the deformities they occasion may be either alleviated or entirely removed, are very instructive. With regard to operations in cases of cicatrix with extensive adhesions, he says,—

“The operation, which of all others, is most entitled to our confidence, especially in cicatrices of the neck, cheek, eyelids, nose, lip, is that in which “*autoplasty*” is brought into service. In all such operations, we are governed by the same principles, and pretty much the same mechanical details. They consist in,

“1. Dividing the cicatrix so as to produce a raw surface, in some part of its extent; or cutting it out entirely, as proposed by Hildanus.

“2. In applying to this raw surface a piece of healthy skin taken from the neighbouring parts.

“3. In attaching this skin by suture to the margins of the wound in which it is inserted.

"4. In approximating the edges of the wound, from which the skin has been removed.

"5. In separating, by appropriate agents the parts too closely approximated, and keeping them in this condition, some time after the flap has united.

"6. In applying oleaginous frictions, and motion to the new made parts to give them flexibility and softness.

"Many shocking deformities from burns have been relieved by the performance of operations conducted on these principles; for example, the eyelid, the cheek, the nose, and the lip have all been restored: but I believe I may claim the merit (if merit there be in adapting an old principle to a new operation,) of having first performed an operation of the kind for the relief of extensive cicatrices of the throat."

ART. 6. *Case of Gun-shot Wound of the Face, with loss of a greater proportion of the Tongue, and extensive lesion of the bony structure, successfully treated; together with an account of interesting Nervous Phenomena, resulting from the injury.* By J. F. Peebles, M. D., Petersburg, Va.—A middle aged man placed the muzzle of a fowling-piece, charged with duck-shot, immediately below and in front of the angle of his right jaw, and discharged the gun with his foot. The charge made an entire breach in the inferior maxillary bone, at the point where it had been received, of more than an inch in length, involving the loss of two lower molar teeth. Passing obliquely upwards through the mouth, the tongue was torn across in the line of the shot, all the free portion of it being severed and thrown forward between the teeth. The charge passed out through the antrum about three quarters of an inch below the eye, carrying with it also the two cuspidati and their alveolar processes.

Nervous Phenomena.—His mouth, particularly the lower portion of it, was drawn to the left side; he complained of feeling a notch in the glass from which he drank, owing to loss of sensation in the right portion of his lower lip, phenomena which indicated lesion in the motor and sensitive nerves which supply the lower portion of the face. The wound happened in August, 1840. In March, 1842, according to Dr. P.'s account, "the mouth is still partially drawn to the left side, and the muscles of the lower part of the right side of the face take no part in the expression of the countenance. During laughter they are motionless, grotesquely distorting the face. But as this state of things is confined to the

lower part of the face, the eyelids and muscles on the side of the nose remaining unaffected, it is probable that the lesion is confined to the lowest branch of the *portio dura* on the face.

“A portion of the motor branch of the fifth pair is also complicated in the lesion, as the muscles of the right cheek are atrophied, and flap, from a want of consent between their action and the motions of the jaw, in such a manner between the teeth as to prevent mastication on that side. But the *sensation* has returned in the lip. This occurred soon after union had begun at the fracture near the symphysis, proving consequently, that the paralysis which had occasioned the loss of sensation was owing only to the pressure exerted by the displacement of bone, on the branch of the third division of the fifth pair of nerves, which emerges from the anterior mental foramen to be distributed on the lip.”

March, 1842; considering the great loss of bone, Dr. P. says, the general contour of the face is but little altered.

“The inferior maxillary bone, though somewhat shortened, and with the exception of a slight protrusion at the point where the union at the symphysis occurred, is perfect and sufficiently strong for the purposes of mastication. The remaining portion of the tongue, doubtless from the long inactivity of its muscles, is atrophied to a mere membrane. It has well developed papillæ, however, and the taste still remains unimpaired. It affords no assistance in speech, or in mastication, (the finger being used in the latter operation to keep the material between the teeth,) but remains motionless on the floor of the mouth. The deglutition is perfect.—The membrane covering the exposed antrum is healthy.”

ART. 7. *Two cases of Inversion of the Uterus.* By W. L. Sutton, M. D., of Georgetown, Ky.

Case I. In this case, inversion and expulsion of the uterus occurred *after* the placenta came away. Dr. S. endeavored to replace it by grasping it between his hands, and, after squeezing it for some time, pushing it in the direction of the outlet of the pelvis. But the uterus was so firm that little impression could be made upon it, and he was unable to reduce it. While squeezing it, blood-vessels spouted and bled for a short time. The patient was ghastly; lips bluish, pupils dilated, pulse very weak; yet there had not been much hemorrhage. Stimuli were given in small quantity, and frequently repeated. She died in about three hours.

Case II. In this case, inversion and expulsion of the uterus occurred *before* the placenta came away; it remaining attached to the fundus uteri, which was without the vulva. There was no hemorrhage; great sinking; lips and countenance livid; pulse scarcely perceptible. The uterus was not firm as in the former

case. Dr. S. separated the placenta; and returned, by moderate and continued pressure, the uterus into the pelvis. The reduction was subsequently completed by Dr. Richardson, for whom Dr. S. sent. At the time the child was born, the body was not expelled by the same pain which expelled the head; but the uterus followed the body by the same pain; the cord was rather short. After six days treatment, Dr. S. says, the patient continued to improve, but her health remained delicate for some time.

ART. 8. *Case of Extravasation of Blood into the cellular texture, beneath the skin of the Penis.* By Edward Jarvis, M. D., Louisville, Ky.

THE SELECT MEDICAL LIBRARY AND BULLETIN OF MEDICAL SCIENCE.—*New Series.* July, 1842.*

ART. 1. *Homœopathy.*—An interesting and useful paper, suggested by Dr. C. Neidhard's "*Answer to the Homœopathic Delusions, by Dr. Oliver Wendell Holmes.*"† Dr. Bell undertakes to state the main doctrines of Hahnemann as succinctly as possible, in order to show why he participates in the opinions of Dr. Holmes respecting homœopathic delusions and homœopathic empiricism. He notices those doctrines under the heads of Pathology, Therapeutics, Materia Medica, and Pharmacy, deriving his information from Hahnemann's *Organon* and his *Materia Medica Pura*.

In speaking of the pathological and therapeutical doctrines of homœopathy, Dr. Bell exhibits the extravagance of the dogma that all chronic diseases arise from syphilis, sycosis, or itch; and points out the folly of abandoning all knowledge of the human frame and all inquiry respecting the suffering organs, for the mere observation of symptoms, which, as in the case of vomiting and sick stomach, may depend upon different organic lesions,—as of the stomach, the brain, the kidneys, or the uterus. He exposes

*Edited by John Bell, M. D., Lecturer on Materia Medica, &c., &c. Philadelphia. Published quarterly at \$5,00 per annum.

†Philadelphia, 1842, pp. 46.

the contradictions and inconsistencies of homœopathical therapeutics, or the doctrine of diseases being cured by medicines which set up similar but stronger diseases in the system, and which diseases, though stronger, so work that they remove inflammation in an organ without inducing severer inflammation. The action of these diseases is more intense than the original disease, and yet, strange to tell, they affect the system so gently that no perceptible operation can be observed ! They set up actions in the system more intense than the disorganizing processes of yellow fever, or plague, or cholera, but still they are not only competent to arrest those disorganizations, but they cause none themselves ! They are all powerful, but yet all mild ! Dr. Bell goes on to contest the plea set up, that all proper curative means ought to act on the diseased frame homœopathically. Disease is not universally cured in this way. The daily practice of the rational school is sometimes to use one, sometimes another class of remedies. The practice of Hahnemann's followers themselves shows that they are not, and cannot be, pure homœopathists.—He himself approves of antidotes in cases of poisoning, and thus clearly admits the antipathic principle *contraria contrariis curantur*. So he does also in urgent and dangerous cases, or in diseases that have just broken out in persons who were previously in health. In fact, the basis of the doctrines of the whole school is but a partial truth, the attempt to generalize a few facts, which necessarily leads to numerous contradictions and absurdities.—The most notable of these are incorporated with the Hahnemannian pharmacology. Hahnemann recommends doses so small as often to be called infinitesimal ; but then, oddly enough, he has discovered, he assures us, that the strength increases with the exiguity of the dose, or the degree of diminution which it undergoes. Agitation or shaking, by increasing the dilution of a medicine, and rubbing by still farther attenuating it, developes, he says, most energetically the inherent virtues of remedies, so that he was forced by experience to reduce the number of shakes to two, where he had formerly prescribed ten to each dilution. In a particular case which he records, he prescribed half a drop of the quadrillionth part of a strong drop of the expressed juice of

the pulsatilla; which implies a dilution equal to that of the original drop in a hundred barrels of alcohol! And this dose, this half a drop of the solution of a drop of pulsatilla juice in a hundred barrels of alcohol, acted energetically as a remedy! Another of his powerful doses is a drop of the tincture of nux vomica at the decillionth degree of dilution. Now this degree signifies, in homœopathic language, the thirtieth dilution, which, if it could be actually carried out, would, as it has been found by calculation, require a mass of alcohol larger than the whole solar system! A drop of the original tincture diffused through the waters of the Atlantic would form a stronger solution than the eighth degree of dilution; and a drop diffused through all the waters of the globe would be more concentrated than the ninth dilution. It is not surprising that Hahnemann should cease to regard the effects of his medicines as dependent on any material impression, but should believe that matter thus divided becomes, as it were, spiritualized!

It has been urged in favour of these extreme doses, that by their exiguity they find ready entrance into the system, and reach at once the source of the disease, which they combat and drive out. This statement rests on faith without evidence, and those who make it overlook the fact that the globules of the blood and of the tissues are of definite size, and that most medicinal agents introduced into the stomach in the rational practice, and in common doses, manifest their presence in the blood and other fluids, and in different tissues and organs. The living organs allow, after suitable preparation, of the passage through the natural filters, or the several membranes, of particles of a size that would horrify the homœopathist. Nature, of course, is here in error, and Hahnemann comes to rectify her crudeness. With him, medicines of even the decillionth dilution are on certain occasions too gross and potent for the animal economy; and he therefore recommends, and his advice is professedly followed by some of his disciples, that a decillionth division of a drop,—that is, a drop of a preparation made by dissolving a drop in a quantity of alcohol greater in mass than the solar system,—be put in a vial, and that this be smelled from time to time, and carefully corked after being

used. In this way the vial, he says, will retain its virtues for years !

After this notice of the doctrines and practices of Homœopathy, Dr. Bell takes up the chief portion of Dr. Neidhard's reply to Dr. Holmes, which is devoted to a display of the weight of authority, names, and numbers, in favour of the new system, and to an attempt to palliate the force of the objections against it on the ground of its failure in trials made of it in France and elsewhere.

The democracy of numbers may, perhaps, be entitled to respect in politics; but the crowd can never be admitted as competent judges in questions of medical, ethical, or mathematical science. Not even the merits of Mormonism could be tested by an appeal to such arbiters. One of the peculiarities of the present age, and especially of our own country, is the strong conviction in the mind of every body that he is equal to every thing; and hence the empiricism which prevails throughout the land, from the halls of our national legislature down to the amateur prescribers for ladies' lap-dogs, including quack doctors, and quack priests, and quack lawyers, to say nothing of quack merchants, and quack mechanics, who feel their vocation to be for any and every thing, except that calling to which they were educated, and in which, by common industry, they might be respectable and wealthy.

Dr. Neidhard endeavours to weaken the testimony of M M. Andral and Bailly, whose trials of homœopathy in hospital practice were any thing but encouraging. Yet those trials appear to have been conducted in the fairest possible manner. The medicines were accurately prepared by a homœopathic chemist of Paris, and used with all the precautions as to regimen, &c., recommended by Hahnemann. The trials in Berlin, authorized by the government, and conducted by two of Hahnemann's disciples, were entire failures. In Russia, a comparison was made of the rational and homœopathic modes of practice, a distinguished follower of Hahnemann conducting the treatment on his side; the result was eminently to the disadvantage of homœopathy. In another trial, in which patients in equal numbers were subjected to the homœopathic practice on one part, and to low diet and ap-

propriate regimen without any medicine on the other, the result was the same in both cases.

Among the practitioners of homœopathy, Dr. Bell numbers three classes; one consistent, acting out their belief; another who, under the pretence of homœopathic doses, give common but small ones, and those of active and sometimes poisonous articles; and a third who are ready to practise either way, allopathically or homœopathically, paying their own judgment and science the odd compliment of asking their patients how they wish to be treated, and according to the reply, either bleeding them, or giving them a Hahnemann vial to smell, and caring not at all how they earn their fees provided fees come into their pockets.

Respecting the conduct of those ignorant persons in the community who prate in favour of homœopathy, Dr. Bell expresses strongly and justly the natural feelings of a man of science and humanity. Notwithstanding the absurdity of the homœopathic doctrine and practice, a preacher, he says, will be found to neglect his pulpit, a schoolmaster his desk, and a merchant his counting-room or store, to trumpet forth their extraordinary merits. Can we admit the claim of such persons to common sense or to common conscientiousness, or the smallest degree of benevolence, when we find them pertinaciously insist on their fellow-men trusting to homœopathy in the hour of sickness, and substituting such a system for the accumulated medical knowledge, experience, and observation of men of genius, industry, and science, during the last two thousand years? Have they no misgiving when almost forcing on a sick friend, who is sometimes weakly and fatally yielding because he is sick, the vagaries of a German enthusiast and mystic, to the exclusion of all the means which for so many ages have been successively accumulated, arranged, and tested for the relief and cure of disease?

These pertinent inquiries are worthy to be maturely pondered, and there are not a few amateur homœopathists in our own city of Baltimore who might be improved both in knowledge and virtue by bestowing upon them a deliberate examination.

The rest of the *Bulletin of Medical Science* consists of bibliographical notices and extracts from Medical Journals.

The volume for July of the *Select Medical Library* is entitled, *The History, Pathology, and Treatment of Puerperal Fever and Crural Phlebitis*. It contains, 1. A treatise on the Epidemic Puerperal Fever of Aberdeen; by Alexander Gordon, M. D.; 2. A treatise on the Puerperal Fever, illustrated by cases which occurred in Leeds and its vicinity in the years 1809—12; by Wm. Hey, Esq.; 3. Facts and observations relative to the Fever commonly called Puerperal; by John Armstrong, M. D.; 4. On Puerperal Fever and Crural Phlebitis; by Robert Lee, M. D., F. R. S. The work commences with an introductory essay by Charles D. Meigs, M. D., Professor of Obstetrics in the Jefferson Medical College.

THE AMERICAN MEDICAL LIBRARY AND INTELLIGENCER, A CONCENTRATED RECORD OF MEDICAL SCIENCE AND LITERATURE.*

The Intelligencer. New Series.—Vol. I., No. 12. June, 1842.

ART. 1. *New Mode of treating Hydrocele.* By J. Pancoast, Professor of Anatomy, Jefferson Medical College, Philadelphia. In early infancy, strong discutient lotions will usually suffice for the cure of hydrocele. After the second year more efficient means are required. Those that are usually employed, Dr. P. has found so uncertain in their result, that he has been induced to adopt the method stated in the present paper. He punctures the swelling, in front and below its middle, with a common thumb-lancet. When the serum is discharged, a little pressure causes the serous or vaginal tunic to protrude in the form of a small cyst. This is laid hold of with a pair of forceps, and drawn out as far as it will admit. The lower part of the cyst next the skin is then divided with a pair of scissors, and traction being again made upon the pedicle still more of the tunic may be drawn from the upper portion of the scrotum, which is nipped partly off, and treated in like manner as before. This process is repeated, while any

*Edited by Robley Dunglison, M. D., Professor of the Ins. of Med. in Jefferson College of Philadelphia, &c. Published monthly, Philadelphia. Five dollars, per annum. Each No. contains,—Intelligencer 16 pages, Library Text 122 pages.

portion of the vaginal tunic can be made to protrude readily at the opening, so as to be laid hold of with the forceps. The testicle and scrotum are then involved with strips of adhesive plaster, after the manner of Fricke of Hamburg in treating hernia humoralis. By this means the cellular tissue of the scrotum (the tunica vaginalis reflexa having been removed to a considerable extent) is brought directly into contact with, and ultimately becomes adherent to that portion of the vaginal tunic which is closely attached to the fibrous coat of the testicle.

The child is allowed to run about as usual, and in a few days is perfectly well. The operation, with the exception of the puncture of the skin, is wholly painless. Dr. P. considers it more speedy and certain in its results than any measure short of injection of the sack, which is not usually practised in children. He has tried it in four cases, and in all successfully. In recent hydrocele of adults, before the tunica vaginalis reflexa has become too much thickened to be drawn out through a narrow opening, he believes that the operation would be equally useful.

ART. 2. *Case of Dropsy dependent upon disease of the Heart. Reported by E. J. Bee, M. D., and John Staige Davis, M. D., Resident Physicians to the Philadelphia Hospital.*

ART. 3. *On the Origin and Development of the Diseased Condition of the Intestinal Glands, which occurs during the course of certain forms of Continued Fever. By John Goodsir, Esq., member of the Med. Chir. Society of Edinburgh, &c. (Read before the Med. Chir. Society, February, 1842.)* From the London and Edinburgh Monthly Journal of Medical Sciences, April, 1842.

ART. 4. *Case of Scirrhus Pylorus. Reported by E. J. Bee, M. D., Resident Physician at the Philadelphia Alms-house in 1842.*—William Burditt came from Nottinghamshire, England; was landed at Philadelphia, May 17th, 1841; and was admitted into the hospital May 19th. He was vomiting, and complained of gnawing and shooting pain in the epigastric region. No abdominal tenderness. No cough, nor pain in the chest. No cephalalgia. Countenance not sallow, but highly florid. Breath very fetid. Never had had vomiting before he came on ship-board; his appetite was good. Was attacked with vomiting im-

mediately after setting sail, and vomited continually during the passage. Not conscious of having any pain in the epigastric region before his attack at sea. Weighed at the time he left England thirteen stone; is now very much emaciated, and supposes he would weigh about seventy-five pounds. Had a passage over, of about fifty-six days. With a stethoscope over the stomach a well marked *bruit de soufflet* was heard, but no purring sound.—Vomited his food imperfectly digested five or ten minutes after taking it. *Diagnosis*—Scirrhus.

Died on the 28th May. Twelve hours before his death said something had given way in his stomach.

Autopsy, 18 hours after death by Dr. Pennock. Lungs normal. Heart and head not examined. Liver cirrhotic.—Spleen nearly natural. Intestines not examined. Kidneys normal. Stomach almost a solid scirrhus mass from the cardiac to the pyloric orifice. Greater curvature not as thick by one half as the smaller. About one-third from the pyloric orifice along greater curvature there was an ulcerated opening, as large as a quarter of a dollar. The contents of the stomach which had been effused through this opening were found in the abdomen.—*Mensuration*. Length of the stomach, following the curvature, three inches. Thickness of coats at cardia, along greater curvature, quarter of an inch. Middle, half an inch, and at pylorus three quarters of an inch. The stomach would contain about five ounces. When removed from the body, it collapsed very little, and retained, perfectly, the outline and form of one which was distended.

ART. 5. *Hope's Mixture as a Remedy in Dysentery*. By Benj. F. Eppes.—Dysentery prevailed in Norfolk, Va., in the summer of 1841, with the usual symptoms of the typhoid form. It had also other peculiar symptoms. The most prominent of these was the unusual force with which the abdominal aorta pulsated; in one case it was strong enough to remove cupping-glasses, placed on by the ordinary mode of suction, and Dr. E. then substituted tumblers exhausted with the flame. The skin was shrivelled and cold, with a clammy sweat over all parts of the body excepting the abdomen, which was hot and dry.

Dr. Eppes, after being disappointed by the remedies ordinarily recommended by authors in this disease, used Hope's Mixture in from forty to fifty cases, and had the satisfaction to lose only two cases. The formula is,

R. Acidi nitrici f. 3 i.
Mist. camphoræ f. 3 viij.
Misce et addẽ
Tr. opii gtt. xl.

Dose.—One-fourth part every three or four hours.

The Library Department contains a continuation of the republication of Hope's *Treatise on the Diseases of the Heart and Great Vessels*, from p. 433, to p. 552.

THE MEDICAL EXAMINER.*

No. 23, Vol. 1, June 4, 1842.

ART. 1. *An account of the Epidemic Influenza, prevailing at Paris; known there under the name of "la Grippe."* By F. Campbell Stewart, M. D. From Dr. Stewart's account of the influenza, or grippe, of Paris, it appears to differ but little from the severer forms of the spring and autumn catarrhs of our Northern and Eastern states. So little treatment is in general required, that when recourse is had to medicines, the mild and simple are preferable.

ART. 2. *Sketches of American Physicians.* THOMAS HARRIS, M. D.

No. 24, June, 11.

ART. 1. *Clinical Reports—Blockley Hospital. Service of W. W. Gerhard, M. D. Reported by M. W. Wilson, M. D., Resident Physician, Pennsylvania Hospital.—Surgical Wards.—Service of Dr. Norris. By E. Hartshorne, M. D., Resident Physician.*

No. 25, June 18.

ART. 1. *Case of Nephritic Congestion, with enormous enlargement and softening of the Organ; produced by violent contusion.* By Robert C. Randolph, M. D. An old man, to prevent the escape of a horse, wrapped the halter around his wrist. The horse pulled him down, and dragged him over a very rocky surface. The man was bled within twenty-four hours, and kept under treatment until his death, twenty days after the accident. The principal symptoms were, soreness around the lower part of the abdomen; bloody urine; and strangury. After death the left kidney was found very much enlarged, projecting upwards under the ribs, and downwards into the pelvis. It was more than a foot in length.

*Edited by J. B. Biddle, M. D. and W. W. Gerhard, M. D., published in Philadelphia, every Saturday; each No. 16 pages; price, three dollars a year.

ART. 2. *Clinical Reports, Blockley Hospital.—Service of W. W. Gerhard, M. D.*

No. 26, June 25.

ART. 1. *Case of Bright's Disease, with remarks. By Wm. P. Johnston, M. D.* Intermittent Fever for fourteen months; occasional swelling of the face; dull pain in lumbar region, subsequently œdema of ankles; Ascites, and finally general Dropsy; death. At the Autopsy, glanular degeneration of the Kidneys, and enlargement of spleen. In the course of the history of the case, Dr. Johnson gives the following report on the examination of the Urine.—“The urine is perfectly clear; there is no sediment; when put in a small glass vessel it appears light coloured, not unlike common champagne. A drop of nitric acid being added, immediately we perceived a cloudy aspect, and after the addition of two or three more drops of the acid, an abundance of yellowish white albuminous flocculi appeared, which speedily sank to the bottom, occupying from the fourth to the third of the space originally occupied by the urine. Heat being applied to a vessel containing a small quantity of urine, a similar albuminous deposit occurred. Acetic acid produced no effect upon the urine. No trace of red globules visible under the microscope.”

In the autopsical account Dr. J. makes the following record concerning the kidneys, “*Left* is five inches long by two and a half wide, (not weighed.) Externally it is of a pale yellowish colour; its external coat is easily detached; the lobules appear rather more distinct than usual; consistence of kidney good. When divided longitudinally, the cortical portion of the gland is seen to occupy a much larger space than in a healthy kidney; it is of a yellowish white colour, granulated in appearance, with five short red lines, running from surface towards cones. Cones imperfect; deficiency supplied by cortical portion.

“*Right*.—Four and a half inches long by two and a quarter wide; thickness one inch and a half, which surpasses that of left. Equally pale externally: pyramids more perfect; cortical portion not less abundant, and similar in appearance to that of left kidney.”

No. 27, July 2.

ART. 1. *Cases of Tetanus successfully treated. By the late Dr. P. J. Bauduy, of the Island of Cuba.* Reported by M. Clymer. Two cases, one traumatic, the other idiopathic. The former is interesting.

“The patient a stout man, 25 years of age, wounded himself in the thigh with a small splinter. The second or third day the wound suppurated and became painful; it was opened but the foreign body was not extracted. On the eighth day there was some stiffness about the jaws, but it was not until the 15th day that the tetanic symptoms were fully developed. Dr. B. commenced his treatment on the 18th day after the accident, when there was complete trismus; great rigidity of limbs; dysuria; pain shooting from the præcordial region to the spine; strong spasms of all the muscles of the trunk, but no opisthotonos. His treatment was of the most active character. The actual cautery was applied to the wound. It was followed by emollient cataplasms. Frictions of hot oil and garlic were used over the surface frequently repeated, and cataplasms of tobacco over the pubis to overcome the spasm of the sphincter of the bladder; a pill of sub-nitrat. hydrarg. grs. x. was given; frictions of nitrat. hydrarg. in hot oil were used over the surface, one grain to the oz. repeated every 3 hours. This treatment was persevered in for four days, with

active purgative enemata every 4 hours, and an occasional anodyne of morphia and camphor. On the 4th day, symptoms of opisthotonos shewed themselves. Strong tartar emetic ointment was rubbed between the shoulders. On the 5th day profuse salivation, coincident with which the symptoms grew more favorable. The mercurial treatment was then stopped; but frictions with hot oil and aqua ammonia were continued, with active purges and occasional anodynes and nervines. On the 17th day the patient was quite well, and riding out.

The case of idiopathic tetanus occurred in a child, three years of age, and was successfully treated. The disease appears in this instance to have been owing partly to the irritation of worms, and partly to checked perspiration from sleeping under an open window. There was violent opisthotonos. The child resting, when attacked with the spasms, on his head and heels. Active purgation, with ol. ricin, ol. tigii, and spts. terebinth., both by mouth and in the form of enema; was kept up from the commencement. A powder containing one grain of calomel with a smaller portion of ipecac. and opium was given every third hour. Cataplasms of tobacco leaves were applied to the jaws and abdomen; and frictions over the surface with hot oil and garlic, with a warm aromatic bath every sixth hour. A blister was applied to the back of the neck on the third day and dressed with morphia. These means were persisted in with scarce any variation for seven days, when symptoms of incipient ptyalism came on. On the 8th day the tetanic symptoms were entirely subdued and did not return.

ART. 2. *Clinical Reports. Blockley Hospital.*—Service of W. W. Gerhard, M. D.

No. 28, July 9.

ART. 1. *Bibliographical Notice of a Work on Deformed Callus*, by S. Laugier, Paris.

ART. 2. *Clinical Reports. Dr. Gerhard.*

No. 29, July 16.

ART. 1. *Contributions to Surgery. By Reynall Coates, M. D.* (Continued from a previous number.)

ART. 2. *A Case of Lumbar Abscess, with Remarks. By David H. Tucker, M. D., of Philadelphia.*

No. 30, July 23.

ART. 1. *Bibliographical Notice of an Article on Vital Action in Animals, and on the Influence of the Atmosphere. By J. Liebig. From Annalen der Chemie und Pharmacie, vol. xli, p. 189.*

No. 31, July 30.

Case of Corneous Excrescence on the Leg. By C. H. Harris, M. D., of Buckingham county, Va. With Remarks by Dr. Reynell Coates.

Dr. Harris states, that a negro girl, about twenty years of age, had on the outer side of the right leg, just below the knee, a large growth of the cuticle resembling a ram's horn. It was two and a half or three inches in diameter at its base, and from six to eight inches in length. It was so void of sensibility, that on its being trimmed with a knife, she made no complaint. Two or three years previously, this limb was very much burnt. Shortly afterwards the corneous growth made its appearance. It was cut off in July 1841. In July 1842, the wound from the opera-

tion was not healed. At different times there has been a renewal of the growth, but, before attaining much size, it has sloughed spontaneously. Before the operation the girl's health was good, and has remained so since. Perhaps the rarest circumstance connected with the foregoing case; says Dr. Coates, is the fact of the excessive cuticular or corneous growth being based upon the cicatrix of a burn.

At the conclusion of his remarks, Dr. C. sets forth two practical surgical precepts, which he considers highly important, and far too frequently neglected:—

“1st. In all operations by incision upon corneous malformations of a purely local character, it is necessary to carry the knife at least as deep as the superficial fascia of the part; and in very irregular structures of this character, such as the large bleeding warts, the incisions should reach the periosteum, unless tendinous thecæ or other intangible tissues intervene.

“2d. In all operations by incision upon cicatrices, we should dissect to the full depth of the structure modified by suppuration; and whenever the step is admissible, we should include the whole cicatrix. The neglect of this precaution is a very frequent cause of mischief and want of success in operations upon even slight cases of deformity from burns.”

THE AMERICAN JOURNAL OF PHARMACY.*

New Series. Vol. 7, No. 4. January, 1842.

ART. 55. *Report of the Committee of Revision on the New Pharmacopœia, made to the College at a special meeting, Nov. 6th, 1841.*—The Committee of the National Convention, to whom was intrusted the revision of the United States' Pharmacopœia, with great propriety called upon the Philadelphia College of Pharmacy to aid in the labour. That the work was well done, is well known to our readers, all of whom we hope have by this time the new edition of the Pharmacopœia in their hands.

ART. 56. *Pharmaceutical Notices, by Augustine Duhamel.*—We extract the prescription of Dr. Berens, a German physician practising in Philadelphia, for the consolidation of copaiva.

Rx.	Ceræ alb.	℥ij.
	Leni calore liquefactæ et semirefrigeratæ adde agitando,	
	Balsam. Copaiv.	℥ss.
	Pulv. Cubebæ.	℥j.

M. Fiant pilul. No. 240, consperg. pulv. lycopod. This seems to obviate the objections made to the consolidation of copaiva with magnesia, and while in other respects it will probably render the gelatine capsules unnecessary, will permit the union of other substances with the copaiva in the same pilular mass.

ART. 57. *Pharmaceutical Society of Great Britain.*—A notice of the circumstances which led to the formation of the present Pharmaceutical Society of Great Britain. Our readers may not be generally aware, that it is only within the last eighteen months that Great Britain has had a pharmaceutical Society!

*Published quarterly by authority of the Philadelphia College of Pharmacy. Edited by Joseph Carson, M. D., and Robert Bridges, M. D., Philadelphia. Each No. 88 pages, 8 vo. Price, \$2.50 per annum.

ART. 58. *Observations on Blistering Plaster*, by Wm. Procter, Jr.—From the occasional delay, or at times complete failure in the officinal plaster in producing its effects, difficulties owing sometimes to the quality of the materials, sometimes to faulty manipulation, the author of the paper suggests the following formula as a substitute for that of the Pharmacopœia; and in consequence of the numerous instances in which its activity has been tested offers it with confidence:—

Take of Cantharides, in fine powder,	℥vj.
Olive Oil, - - - - -	℥vj.
Oil of Turpentine, - - -	℥ij.
Yellow wax and Resin, of each,	℥iv.

“Mix the cantharides with the olive oil, and oil of turpentine in a suitable vessel; place the mixture in a water bath and continue the heat until the turpentine has nearly all evaporated, which requires six or eight hours, and stir it occasionally during that period. Then add the wax and resin, previously melted together, and continue the heat until they are thoroughly incorporated, and finally remove the vessel from the bath and stir them constantly until cool.

“The object of adding the oil of turpentine is to increase the quantity of the vehicle, and thus sooner and more effectually to dissolve the cantharadin; and its volatility affords a ready means of getting rid of it, after it has performed that function. The proportion of olive oil is rather greater than in the Pharmacopœia, but it is believed to be properly increased. Vesication has been produced in several instances in *two hours*, and from that to *six* has been the period found necessary to its complete action.”

The writer also suggests the substitution of oiled silk, in the place of sheep skin, upon which to spread the cerate, as the skin in common use from its pervious character often absorbs so much of the oil that the surface of the plaster is left too dry, thus interfering with its adhesiveness and its activity. The suggestion appears to be a good one.

ART. 59. *On vesicating applications*, by Mr. Redwood, read before the Pharmaceutical Society of London. From the London Pharmaceut. Trans. Oct. 1841.

ART. 60. *Mr. Liston's, Isinglass plaster*, by Jacob Bell. From the London Pharmaceut. Trans. Oct. 1841.—Directions are given for making the above, which is doubtless very excellent, but hardly likely soon to supersede the ordinary adhesive plaster.

ART. 61. *The Apothecaries Company vs. Greenough*. From the London Pharmaceut. Trans. Oct. 1841.—A family quarrel of no interest to our readers.

ART. 62. *Academy of Medicine of Paris. Reports on poisoning by Arsenious Acid*, extracted, from the Jour. de Chim. Med.—The conclusions of such men as Orfila, Caventou, Chevallier and Pelletier, upon such medico-legal questions, come with the highest authority; the most important we subjoin:—

1st. That arsenic cannot be obtained from the human body in its natural state.

2d. That although with Marsh's apparatus other substances such as sulphite and phosphite of ammonia, Dippel's animal oil, and oil of turpentine, give spots resembling those given by arsenic, yet the former need not be confounded with the latter. If *not arsenical*, they dissolve slowly and not perfectly in strong nitric acid; and the solution evaporated and touched with a drop of nitrate of silver assumes a *yellow*, like the phosphate of silver.

If *arsenical*, they dissolve rapidly in *cold* nitric acid; and the solution evaporated and treated with the nitrate of silver gives at once a *brick red* colour.

3d. The presence of bichloride of mercury, of chloride of tin or of lead, of sulphate or chloride of zinc, gives spots resembling those of arsenic, soluble also in cold nitric acid. But none yield the brick red colour when the solutions are treated with nitrate of silver.

4th. The hydrated peroxide of iron is an antidote for arsenic acid as well as for arsenious acid.

5th. That colcothar should never be employed as an antidote for either arsenical acid, as it does not neutralize them even in an exorbitant dose.

ART. 63. *On Hippuric Acid and its tests*, by Alex. Ure, M. D., A. M. Read 9th June, 1841. From the *Pharmaceut. Trans.*—Dr. Ure's experiments on the effects of benzoic acid, and the soluble benzoates upon the human system, have led him to the conclusion, that they accomplish a great change in the urinary secretion;—that under their influence, uric acid and the urates disappear, and are replaced by hippuric acid and hippurates. This very important change is at all times within our control. Uric acid and the urates being very sparingly soluble, while hippuric acid and the hippurates are very soluble, the application of the above principle will enable the practitioner to obviate entirely the various depositions resulting from excess of uric acid, the fruitful source of that most distressing malady, stone in the bladder, as also to control and prevent the formation of the concretions, which occasion so much deformity and pain to individuals labouring under gout." By the proper use of benzoic acid or a benzoate, Dr. Ure finds the desired effect can be produced without any risk of affecting the general health, or of irritating the urinary organs. This plan of treatment by no means precludes the adoption of other suitable remedial measures. He recommends the use of benzoic acid dissolved in phosphate of soda, or of biborat. of soda or of the benzoate of ammonia or of potash.

ART. 64. *Antidote to the Salts of Copper*. By W. Benoist, Pharmaceutist at Sancoius. From the *Jour. de Chimie Med.*—The writer suggests the use of a solution of carbonate of soda, (potassa would doubtless answer as well if soda could not be had) to decompose the cupreous salt in the stomach, and convert it into an insoluble carbonate of copper. In conjunction with the most expeditious means for relieving the stomach of its contents, we would consider the suggestion a judicious one.

ART. 65. *New process for the detection of copper, applicable to Medico-legal analysis*. By M. Verguin, of Lyons. From the *Jour. de Pharm.*—The process proposed is similar to that employed for detecting the presence of mercury; galvanic decomposition of the compound.

"The suspected liquid, concentrated and slightly acidulated with hydrochloric acid, is placed in a plate of platinum, and covered with a well polished plate of iron, in such a manner that the iron shall touch both the liquid and platinum. In a few seconds the platinum exhibits a very adherent covering of copper, throughout every part touched by the liquid," if any compound of copper has been present.

Vol. 8, No. 1. April, 1842.

ART. 1. *Introductory lecture delivered at the College of Pharmacy, Nov. 4, 1841.* By Wm. R. Fisher, M. D. Professor of General and Pharmaceutical Chemistry.—

A very appropriate address to the class of young gentlemen engaged in the study of Pharmacy. The value of the study of chemistry, not only to the pharmacist but to the physician, and its interest to the general scholar, are of late becoming more fully acknowledged. And the manner in which the study may be best pursued, in the estimation of the profession and the public, at the present day, differs materially from the method prevailing no very long time since. In former times to have listened to lectures was *ex necessitate* to have learned chemistry. The narrative of the professor was expected to impress upon his hearers all the important truths and practical applications of a science as limitless as the universe, or at least to impress them with the proper degree of amazement,—

“That one small head could carry all he knew.”

A science of facts can only be taught by the exhibition of facts, and all who have witnessed professor Fisher's neat and successful experimental illustrations during his lectures, will recollect how essential they were to the proper elucidation of his subject. He is one of those who cannot be satisfied with merely talking about science to his class. With the apparatus at his command, and with the enthusiasm which he brings to the task, his pupils may rest assured that it will be their own fault if they do not become practical chemists.

ART. 2. *Observations on Zamia Integrifolia, the plant which affords Florida Arrow Root.* By Joseph Carson, M. D.

ART. 3. *Remarks on syrup of Wild Cherry Bark and on syrup of Valerian.* By W. Proctor, Jr. and J. C. Turnpenny.

ART. 4. *Observations on hydrated peroxide of Iron, demonstrative of its decrease in power as an antidote for Arsenious Acid, by age; and some hints on the method of preparing it.* By Wm. Proctor, Jr.—From a number of very satisfactory and conclusive experiments, here detailed, the author of this paper arrives at the following conclusions:—

1st. That hydrated peroxide of iron, even when kept under water, gradually decreases in its power of neutralizing arsenious acid.

2d. That if kept in the form of a thick magma it will retain its properties longer than when mixed with much water.

3d. That this decrease in power is probably due to a change in the relative proportion of the oxide and the water chemically combined with it, as well as to an alteration in its state of aggregation.

4th. That from the experiments of Orfila, and others, the dry hydrated oxide possesses the power to a considerable extent of neutralizing arsenious acid, and it should be used in the absence of the moist and recent preparation.

5th. That hydrated peroxide of iron may be obtained, in a state fit for use, in 10 or 15 minutes by using a solution of the persulphate of iron.

6th. That the recent oxide should be used in all cases, where it is attainable, in preference to that long kept.

Mr. P. suggests that a solution of persulphate of iron, of known strength, be kept constantly on hand, from which the peroxide could be obtained extemporaneously at any moment.

The difference, produced by age, in the efficacy of the peroxide of iron, as an antidote for the arsenical compounds, would seem to be referable to the same cause that appears to create the difference in this respect between the hydrated and the

anhydrous oxide. That cause, we conceive, to be simply the difference in the cohesive attraction between the ultimate atoms of the oxide in those two conditions.—The force tending to unite either of the arsenical acids with the oxide, acts manifestly between the atoms of these bodies, and is a feeble force. Where the atoms of the oxide are held together by any cohesive attraction, that must first be overcome before any union can be effected between those atoms and any other substance; and where the cohesive attraction is great, and the force tending to overcome it (as the attraction between arsenious acid and oxide of iron) feeble, the chemical union of the acid and the oxide must go on very slowly. In the recently precipitated and hydrated oxide, we conceive the mass must be in a state of ultimate subdivision, and cohesive attraction at its minimum. And in the dry and anhydrous oxide, we conceive cohesion to be at its maximum. By lapse of time, the particles of the recently precipitated mass are brought more closely together by the constant action of the same cohesive force. And the diminished quantity of water in chemical combination with the older specimens of prepared oxide, would seem to be not so much the cause of their inefficacy, but rather an effect produced by the true cause of their inactivity; the water of combination escaping, as the particles slowly approximate, under the influence of a force rapidly increasing with the diminution in distance between them. And as this increase in density can go on to a certain extent beneath the surface of water, it follows that the presence of water will not suffice to preserve the precipitate in the condition in which it is first thrown down.

ART. 5. *Observations on the action of Ether on Galls.* By Robert Bridges, M. D.

ART. 6. *Remarks in some of the Mercurial Compounds.* By James Hamilton, M. D., Baltimore. *From the Maryland Med. and Surg. Journal.*

ART. 7. *On the preparation of the Iodide of Iron.* By Dr. A. T. Thomson.—*From the London Pharmaceut. Trans. Aug. 1841.*—The Dr. finds that the iodide of iron, which in solution is so prone to decomposition, may be kept unchanged in the form of syrup. His receipt we give.

Iodine,	grs. 252
Pure soft iron wire free from rust	grs. 48
Distilled water,	℥ 12½.

Boil them together in a narrow necked flask, until the fluid becomes nearly colorless, filter the solution into a deep capsule kept hot; evaporate to two-thirds, and add as much refined sugar as will make a thick syrup, aiding its solution with a gentle heat. The syrup should be so thick, as to admit of the addition of as much boiling distilled water as will make the whole twelve ounces and a half, so that each fluid drachm of the syrup will contain three grains of the Iodide of iron. This syrup, well prepared, undergoes no decomposition when exposed to the air or the light.

ART. 8. *On the preparation of unguentum Hydrarg. Nitratis.* By Mr. Alsop.—*From the Lond. Pharm. Trans. Sept. 1841.*—The writer concurs with Dr. Duncan, of Edinburg, in recommending the following process for the above preparation, as superior to the formula of the Pharmacopœia, premising, that acid of standard strength is indispensable.

“Dissolve the mercury in the acid, and pour the solution while still hot into the lard, melted in the oil and also still hot, and mix in a vessel capable of containing

five times the quantity, as a violent effervescence takes place. If it should not froth up, the action must be assisted by heat.

This process, we are informed, is originally that of Mr. Duncan, of Edinburgh, and yields the most perfect citrine ointment, preserving a fine golden colour and the requisite softness."

ART. 9. *On White Lead.* By Jas. C. Booth.—An elaborate description of the various processes by which the article, at different times, has been made.

THE NEW YORK LANCET.*

Vol. 1—No. 22 to No. 26, for June 1842. Vol. II—No. 1 to No. 5, for July, 1842.

A course of Lectures on Diseases of the chest, Percussion, and Auscultation, by John A Swett, M. D. Lectures X. to XVII.—The first of these lectures, No. X., is devoted to aneurism of the aorta. After describing the mode of production, symptoms. and terminations of true and false aneurism, Dr. S. goes on to mention another form of the disease, which has been called "dissecting aneurism." The first cases of this disease were described by Mr. Skeleton of Dublin. According to him the middle coat was dissected from the external coat for a considerable distance, at the same time that a communication existed with the interior of the vessel. Dr. Swett has seen two cases in which the aneurismal cavity was formed, not by the separation of the middle and external coats but by the *actual splitting* of the middle coat itself, the coats of the artery presenting no other peculiar or very marked disease. Dr. Goddard of Philadelphia published a similar case two or three years ago in the American Journal. Laennec has published a case in his treatise on auscultation similar to Mr. Skeleton's, which he regarded then as perfectly unique; and another case by Dr. Power was reported in the first year of this Journal.

In Lecture XV. among other forms of Laryngitis, Dr. Swett speaks of a sub-acute rather than a chronic form of this affection, of late days becoming very frequent, the "clergyman's sore throat." He believes the majority of cases of this affection are produced in the following manner. A public speaker contracts a common catarrh, accompanied with more or less hoarseness, and during the continuance of this is obliged to preach, or speak in public; for the disease is not confined to clergymen, but is common among actors, public singers, and all those who are obliged to exercise the voice much in public. Thus day by day the hoarseness is increased, and a sub-acute inflammation fixed in the larynx, producing the disease in question, which he believes is a simple thickening, and increased vascularity of the mucous membrane, just enough to produce hoarseness, some slight difficulty in the entrance of the air into the lungs, and in advanced cases more or less complete aphonia. In many cases there is an important complication,—that is, dyspepsia; for the persons subject to this complaint are persons of sedentary habits for the most part, and dyspeptic; and dyspepsia in many cases produces sympa-

*Edited by James A. Houston, M. D. Published weekly, New York. Each number 16 pages. Price \$3.00 per annum.

thetic irritation about the throat. Frequently however in such cases the removal of the dyspepsia occasions a rapid subsidence of the throat-symptoms. The treatment of this troublesome disease is very simple, and the prospect of cure considerable. Bleeding, leeches, and the other antiphlogistic and revulsive agents, he thinks, rather augment than diminish the complaint; though in a few cases he has seen repeated leeching remove the disease. The best treatment is a *mild mercurial course*, which is almost invariably successful. Irritating injections into the larynx and trachea have been advised lately by some French physicians, but this operation requires great tact for its proper performance, and facts are not numerous enough to warrant its preference over the simpler mode above advised.

Nos. 23. 24. and 25. Each of these Nos. contains *Remarks illustrative of the nature, symptoms, and treatment of Spinal Curvatures*; by Richard S. Kissam, M.D.—From the last of these papers we extract a brief outline of his plan of treatment. In the treatment of lateral curvature with projecting shoulder, hip, and ribs, the treatment must consist; 1st. In removing the cause; 2d. In correcting the constitutional disturbance; 3d. In the application of mechanical means to restore the distortion to a normal condition; 4th. A system of exercise calculated to restore the balance of muscular action. In the fulfilment of the third of these indications, much fault is found with the action of the ordinary mechanical agents, the operation of which is usually to *push in or flatten* a projection, and to *stretch out or straighten* a curve. Both of these objects are sometimes accomplished, but it is always at the expense of some delicate organ. The true method, he thinks, is to produce a counter-curve; this is effected by moderate extension and lateral pressure. Guerin of Paris effects this in a bed, where of course the patient is much confined to a recumbent position. Dr. K. has described in the 5th number of the *Lancet* an orthopædic chair designed by him to fulfil the same indications, which has the advantage of enabling the patient to retain the sitting position, read, sew, &c., while at the same time advantage is taken of the gravity of the body to promote extension. In the recumbent position, a firm convex pillow should be placed under the convex side of the patient, so that projection will be opposed to projection, thus producing innocent pressure, counter-curvature, and extension by means of the double inclined plane of the convex pillow; when this is used, the bed should be an inclined plane, and no pillow should be placed under the head. Shampooing, frictions, and manipulation are of great service. Constant attention to position will work wonders in relieving these deformities. Whatever apparatus is used, however, must be gradually imposed upon the patient, as the muscles should not be pained or overtaken. The whole intention is to direct the growth of the parts implicated in a proper direction; and this must be aided by appropriate exercise. Raising the body by the arms from the rounds of a ladder placed against a wall; or a cord passing through two pulleys with a weight at one end, and a cross stick for the hands at the other, by exercising the muscles of the back and arms are highly useful means. He has had no personal experience in cutting the contracted spinal muscles, but would not now hesitate to operate in some cases, though as a general rule he thinks it unnecessary. Rest in a horizontal position should be taken several times in the course of the day, and for a half an hour at a time; immediately before meals is the most appropriate time for this.—Cases of lateral curvature from caries of the vertebræ so seldom occur uncomplicated, and their treatment is so nearly identical with that of

convex curvature, that little is to be said of them. If only one or two vertebræ are affected, slight deformity will ensue, if the patient when in bed will lie on the affected side; and when sitting up will rest the arm of the diseased side on the arm of an easy chair, and when walking will use a crutch on the sound side. These mechanical measures are all intended to keep the spine erect, and prevent its leaning to the diseased side. As to the caries itself it will be spoken of under the head of convex curvature. The concave curvature, or incurvation, having for its usual cause a rachitic condition, resort must be had to the usual remedies for this diathesis. After the tone of the system has been restored by a tonic course of food, air, sea-bathing and medicines, the local treatment must consist in bathing the loins with cold water, following it with friction, and assuming as much as possible a position the model for which may be found in any smoking room, and which travellers say is strictly American,—sitting with the glutæi muscles on the extreme edge of a wide flat-bottomed chair, leaning far back on the arms and back of the chair, and resting the feet high up on the back of another chair; this position is admirable for the purposes of cure, fulfilling every indication. In the recumbent position the patient should lie as much as possible flat on the back. In the treatment of convex or posterior curvature the author laments our inability to decide positively on the early appearance of the disease as to its true character. This is generally known to the surgeon, when weakness or spasms of the lower extremities, abscess at the groin and the general deterioration of health, show that carious suppuration has already gone on to a considerable extent, and he is called in to take charge of a case, which for the most part he would willingly relinquish. If happily the nature of the disease is discovered at an early period, he has a comparatively easy part to perform; counter-irritation by means of blisters, attention to the general health, the recumbent position for a few weeks, or until the inflammatory symptoms are subdued; and then proper support from crutches, or corsets, or a back-board, or any other apparatus calculated to remove the superincumbent weight, will greatly facilitate recovery. When the disease is still further advanced, and has already destroyed the bodies of some of the vertebræ, our main object must be to prevent it from advancing to the adjacent and comparatively sound bones. Blisters and setons should be applied over the seat of tenderness and disease, but not continued longer than necessary to remove the local pain and tenderness. Issues are the means most to be relied on, but if persisted in for too long a time they become a source of irritation, and prevent the reparative process from advancing. Tonics, sea-bathing, pure air, and gentle exercise must be prescribed. When psoas abscess occurs, and the matter points in the groin,—*do not open it.*—For it is surprising how much pus frequently is absorbed, and how much mischief follows the admission of air in these cases even from the smallest puncture. When, however, the accumulation of matter is very great, and by its pressure and burrowing becomes dangerous, it should be evacuated by very minute punctures, and the sac allowed to contract as fast as the pus escapes; these punctures then to be covered with lint and adhesive plaster to exclude the air. When the progress of the caries is arrested and reparation by means of anchylosis has commenced, then and not before should mechanical means be used to combat the deformity. The method he employs is to place such a contrivance upon the back as shall not disturb the anchylosis, (the key-stone of the arch,) but by pressing upon the sound vertebræ

only as a fulcrum, to draw back the shoulders by simple straps, and thus in children train the back to an erect position, expand the chest, and relieve the digestive organs from pressure. Sometimes slight extension becomes necessary from the position of the curvature, for when it is high up, bending the back will not effect the object. Indeed almost every case requires a modification of the instruments, and the following cautions are necessary. 1st. Not to extend the spine more than the child can effect by voluntary efforts; and 2d, to be sure that the weight is carried by the pelvis, and not imposed upon the spinal column. Any apparatus constructed with a view (and the greater part are) of pushing in the hump sin against philosophy, physiology, and humanity. Dr. K. has described in the 12th No. of the *Lancet* an apparatus which, with proper modifications to suit individual peculiarities, he thinks most appropriate for this class of cases. When this form of curvature depends upon absorption caused by aneurism, it is perhaps useless to say it should be left to nature.

A course of Lectures on the Principles and Operations of Orthopædic Surgery, by Wm. Detmold, M. D.—This consists of five lectures, and is contained in the numbers for June. Dr. Detmold's skill and success in this branch of surgery render whatever he may say on the subject valuable.

Lectures on Surgery, with Surgical and Pathological Anatomy; by Valentine Mott, M. D., Prof. of Surgery, &c.—These also are contained in the June numbers.

Lectures on Gonorrhœa and Syphilis; by John Hunter, F. R. S; delivered at St. George's Hospital, London. From the manuscript notes of Dr. Thos. Shute.—Six of these interesting lectures are published in the Nos. for July. Their style is much more familiar than that of Hunter's immortal work on the venereal disease, and they contain many practical hints of great value. Any thing from John Hunter on this subject is worthy of being preserved, and though these lectures contain but little information which we are not already in possession of in his more elaborate works, still they may be read with great pleasure.

In these numbers of the *Lancet*, under the editorial head there is a series of papers on the subject of *medical education*, in favor of a reform in the plan pursued by our medical schools throughout the country.

THE WESTERN JOURNAL OF MEDICINE AND SURGERY.*

No. 28, April, 1842.

ART. 1. *A Clinical Lecture on the Nature, Causes, and Treatment of Strabismus, &c. By S. D. Gross, M. D., Professor of Surgery in the Louisville Medical Institute.* (pp. 24.) Several views set forth in this paper deserve consideration. Among them are the following:—That in nearly all instances of strabismus, at least of the convergent variety, both eyes are implicated, though not in an equal degree:—that if, when both eyes are involved, an operation be performed on one only, the operation would be imperfect, or, perhaps, a complete failure:—that strabismus may be unquestionably a connate affection, but that it is much less frequently connate,

* Edited by Daniel Drake, M. D., and Lunsford P. Yandell, M. D., Professors in the Louisville Medical Institute, and Thomas W. Colescott, M. D. Published monthly, Louisville, Ky, each No. 80 pages. Price \$5.00 per annum.

than is generally supposed;—and that a hereditary predisposition to strabismus, believed by some writers to exist, is doubtful. Professor Gross has operated between thirty and forty times. Most of the cases being scattered over the country he has received authentic information as to the results from ten only. Of these, eight are perfectly successful; a year or more having elapsed since the operation was performed on some of them.

ART. 2. *Phlegmasia Dolens*. By John Hardin, M. D.—In four cases of this disease, a strong cotton roller was applied comfortably tight to the whole limb, from the toes to the hip; and it was then wet with warm whiskey saturated with red pepper. The pain was immediately removed. Two cases were well in ten days; the other two in twelve. In each of the cases about one gallon was used in the first twenty-four hours; afterwards from a pint to a quart. Internal remedies were prescribed for the constitutional indications of each case.

No. 29, May;—No. 30, June.

These numbers have not been received.

No. 31, July, 1842.

ART. 1. *A History of the Improvements which Practical Medicine has derived from Auscultation, &c.* By G. Peyraud, M. D. Translated from the French for the *Western Journal of Med. and Sur.* By Charles A. Pope, M. D. &c. pp. 58. (To be continued.)

THE WESTERN LANCET, DEVOTED TO MEDICAL AND SURGICAL
SCIENCE.*

Vol. 1, No. 1, May;—No. 2, June.

THE WESTERN AND SOUTHERN MEDICAL RECORDER.†

Vol. 1, No. 6, April; No. 7, May; No. 8, June; No. 9, July.

An epitome of articles in the two last named journals, has been prepared, but is excluded for want of space.

*Edited by Leonidas Moreau Lawson, M. D. Published Monthly, Cincinnati. Each number 48 pages. Price \$3.00, per annum.

†Edited by James Conquest Cross, M. D. Published Monthly, Lexington, Ky. Each number 48 pages. Price \$4 00, per annum.

Review.

The Climate of the United States and its Endemic Influences. Based on the records of the Medical Department and Adjutant General's Office, U. S. A. By SAMUEL FORRY, M. D. 8vo. pp. 378. New York, J. & H. Langley.

We have here the first contribution, of any extent, which has yet been made to the Medical Statistics of our country. The author proposes to supply a desideratum in medical literature, a treatise on the climate and endemic influences of the United States; first giving a classification of the principal phenomena of our climate, physically considered, and next attempting to trace out the medical relation of their laws, in order to establish a correct classification of climates, based upon observations.

How far he has succeeded, the profession is to decide. The most cursory glance at the interesting volume, he has furnished, will suffice to reveal the labour and research bestowed upon the subject. While the general results attained would seem to be undeniably true, there is room for difference of opinion, whether the prevalent disease among the troops at particular forts, widely separated, can be considered as the prevalent disease of the entire region, and still more whether the proportion of different diseases, at these posts, can be considered as indicating the true proportion for the region. In other words, we conceive, it must be left for future observers to determine how far the statistical results in relation to disease and mortality in the army, as deduced from the army reports, are true in relation to the population between the various posts. The physical phenomena of our climate, we are told, have been principally deduced from data furnished by the "Army Meteorological Register."

"This Register, collated by the writer, who was then on duty in the Surgeon General's office, comprises the general results of instrumental observations, made at our various military posts, during a period of eleven years (from 1820 to 1830 inclusive;) and also with the exception of the first ten years the detailed observations of the same period in the way of monthly tabular abstracts. As the instruments provided, however, never exceeded a thermometer and a rain-gage, the observations including those upon the course of the winds and other obvious states of the weather have necessarily had a limited range. The results are consequently less comprehensive than the present state of meteorological science demands; but as temperature is the most prominent and perhaps the controlling element in the constitution of climate, and as the observations presented extend over the entire domain of our states and organized territories, it may reasonably be assumed that

the results exhibit a fair expression of the general laws of our climate ; a knowledge which further research will render more precise."

Even with the limited means at their command, the scientific spirit of our army surgeons has accumulated a vast mass of interesting and useful facts, sufficing to point out with great accuracy the direction of the isothermal lines (or those of equal annual temperature) across our continent, and also the direction of the isothermal and the isocheimal curves or those indicating the regions of equal summer and of equal winter temperature. The intimate connexion between meteorology and medical science is thus noticed by our author.

"The records of medical philosophy demonstrate that the phenomena of life are not the result of original organization only, but that the moral, intellectual, and physical capacities of man are subject to the influences of those causes, the aggregate of which constitute climate. This doctrine receives an apposite elucidation in the corporeal degeneration induced by malaria. So deep and pervading are the effects of this subtle poison on the indigenous inhabitants of marshy districts in warm climates that the energies of the system are sapped and premature decrepitude induced, and when subjected to these baneful exhalations through successive generations, the mind becomes torpid and imbecile, the moral sentiments debased, and the stature and symmetry of the body deteriorated. Again, it finds a ready illustration in the history of a recent epidemic (*cholera asphyxia*) which in its wide diffusion threatened to depopulate vast tracts of the earth's surface, but which doubtless owing to great meteorological changes, notwithstanding inappreciable by our endiometric instruments, suddenly ceased its ravages and left like many other destructive pestilences in preceding ages, scarce a trace behind but the terror of its name."

In the same pleasing style our author proceeds to more extended views ; to the relation between meteorology and the natural history of man ; to the influence of temperature upon political institutions and social organization ; to the connexion between the sterner climates and the sterner intellectual powers ; between the voluptuous air of the tropics and the effeminacy and servility of their inhabitants. The thermometrical data give the following general divisions of the United States.

SYSTEMS OF CLIMATE.

- | | | |
|---------------------|--------------|--|
| 1. <i>Northern.</i> | { 1st Class. | Ports on the coast of N. E. extending as far south as the harbour of New York. |
| | { 2d " " | Ports on the northern chain of lakes. |
| | { 3d " " | Ports remote from the ocean and inland seas. |
| 2. <i>Middle.</i> | { 1st Class. | Atlantic coast from Delaware bay to Savannah. |
| | { 2d " " | Interior station. |
| 3. <i>Southern.</i> | { 1st Class. | Ports on the lower Mississippi. |
| | { 2d " " | Ports in the peninsula of East Florida. |

The peculiarities of these several systems of climate, are given in valuable and interesting tabular abstracts deduced from long continued observations at the several ports. Some of those of most interest we subjoin :—

[A] — *Systems of Climate in the Northern Division.*

<i>Posts on the Ocean and the Lakes, or Mild and Uniform Climates.</i>	No. of years of observation.	Lat.	Mean Annual Temp.	Mean Temp. of		Difference of the Mean Temp. of		Mean Annual Range.
				Winter.	Summer.	Winter and Summer.	Winter and Spring.	Warmest & coldest month.
Fort Brady, Outlet of Lake Superior,	6	46° 39'	41° 39'	21° 07'	63° 18'	42° 11'	18° 42'	47° 22'
“ Vancouver, Oregon Territory,	1	45 37	51 75	41 33	65 —	23 67	6 67	28 —
“ Sullivan, Eastport, Maine,	5	44 44	42 95	22 95	62 10	39 15	17 16	43 87
“ Preble, Portland, Maine,	5	43 38	46 67	26 03	67 06	41 03	18 42	47 89
“ Niagara, Lake Ontario, New York,	2	43 15	51 69	30 46	72 19	41 73	16 77	49 40
“ Constitution, Portsmouth, New Hampshire,	4	43 04	47 21	28 39	65 72	36 33	16 83	43 39
“ Wolcott, Newport, Rhode Island,	9	41 30	50 61	32 51	69 06	36 55	14 71	41 52
“ Trumbull, New London, Connecticut,	2	41 22	55 —	39 33	71 89	32 56	11 67	39 37
“ Columbus, New York Harbor,	9	40 42	53 —	32 39	73 70	41 31	17 87	45 92
<i>Posts remote from the Ocean and Lakes, or Excessive Climates.</i>								
Hancock Barracks, Houlton, Maine,	2	46° 10'	41° 21'	16° 74'	62° 93'	46° 19'	24° 49'	54° 70'
Fort Snelling, at the confluence of the St. Peter's and the Mississippi,	8	44 53	45 83	15 95	72 75	56 60	30 83	61 86
“ Howard, Green Bay, Wisconsin,	9	41 40	44 92	19 77	69 82	50 05	24 10	54 11
“ Crawford, Prairie du Chien, Wisconsin,	2	43 03	45 52	19 90	70 79	50 89	25 38	52 68
Council Bluffs, near the junction of the Platte and Missouri.	5	41 45	51 02	24 47	75 82	51 35	27 47	54 77
Fort Armstrong, Rock Island, Illinois,	4	41 28	51 64	26 86	75 91	49 05	23 99	54 14
West Point, New York,	4	41 22	52 47	32 11	72 86	40 75	18 82	46 17

[G]

Meteorological results of the Middle Division.

Posts of the Middle Division.	No. of yrs. of Obser.	Latitude.	Mean Anl Temp.	Mean Temp. of		Difference of the Mean Temp. of			Mean Annual Range
				Winter.	Summer.	Winter & Summer.	Winter & Spring.	Warm'st & coldest Month.	
FORT MIFFLIN, near Philadelphia.....	2	39° 51'	55°.25	33s.11	77°.93	44°.82	18°.33	48°.03	57°
WASHINGTON CITY, D. C.....	8	38 53	56°.57	37.76	76.74	38.98	18.43	42.40	84
JEFFERSON BARRACKS, near St. Louis....	4	38 28	58.14	37.67	78.45	40.78	21.03	45.15	89
FORT MONROE, Old Point Comfort, Va....	5	37 02	61.43	45.17	78.31	33.14	13.74	36.82	73
FORT GIBSON, Arkansas.....	3	35 47	62.90	44.31	81.14	36.83	18.18	42.03	89
" JOHNSTON, Coast of North Carolina.	5	34 --	66.96	52.48	80.31	27.83	14.02	30.15	62
AUGUSTA ARSENAL, Georgia.....	5	32 26	66.01	51.43	81.06	29.63	14.46	32.54	73
FORT MOULTRIE, Charleston Harbor.....	2	32 42	65.78	49.93	80.27	30.34	16.35	35.73	69
" JESUP, near Sabine River, La.....	8	31 30	68.03	53.19	82.48	29.29	14.74	31.24	77

[H]

Meteorological results of the Southern Division.

Posts of the Southern Division.	No. of yrs. of Obser.	Latitude.	Mean Anl Temp.	Mean Temp. of		Difference of the Mean Temp. of			Mean Annual Range
				Winter.	Summer.	Winter & Summer.	Winter & Spring.	Warm'st & coldest Month.	
CANTONMENT CLINCH, near Pensacola,....	7	30° 24'	69°.44	56°.14	82°.24	26°.10	13°.12	28°.60	70°
PETITE COQUILLE, near New Orleans,....	4	30 10	71.25	59.26	83.46	24.20	10.71	27.97	64
FORT MARION, St. Augustine,.....	4	29 50	72.66	62.21	82.50	20.09	9.29	22.08	53
" KING, interior of East Florida,.....	3	29 12	72.66	61.78	84.20	22.42	10.78	25.69	78
" BROOKE, Tampa Bay,.....	5	27 57	73.42	64.76	81.25	16.49	8.35	18.66	59
KEY WEST OR THOMPSON'S ISLAND.....	3	24 33	76.09	70.05	81.39	11.34	5.99	14.66	37

MIDDLE DIVISION. (*Tables of Temperature.*)

In the second part of his volume, our author after a detailed geographical and topographical description of the several military posts, with the character of the diseases prevalent, and the ratio of mortality at each, furnishes some useful general deductions; and again many interesting tables showing the ratio of particular diseases in theseveral climates assumed:—

RATIO OF CATARRHAL DISEASES.

Divisions.	Systems of Climate.	Latitude.	Diff. between the mean temp. of winter and summer.	Ratio treated per 1000 strength.				
				First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual result.
Sou. Mid. Noth'n.	1st Class. Posts on coast of N. Eng.....	43° 18'	38°.61	63	49	36	85	233
	2d Class. Posts on N. chain of Lakes.....	46 27	43 .00	90	62	50	96	300
	3d Class. Posts remote from the ocean and inland seas.....	44 53	55 .84	175	120	86	169	552
	1st Class. From Del. Bay to Savannah.....	37 02	32 .99	102	45	23	97	271
	2d Class. South-western Stations.....	35 47	36 .83	122	61	33	78	290
Sou.	1st Class. Posts on the Lower Mississippi.....	30 10	24 .39	82	34	26	60	218
	2d Class. Posts in the Penin. of Florida.....	24 33	11 34*	45	24	40	33	143
Average,				98	56	42	88	287

RATIO OF PLEURITIS AND PNEUMONIA.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. North'n.	1st Class. Posts on the coast of New England.....	12	11	8	10	41
	2d Class. Posts on Northern chain of Lakes.....	11	15	13	11	49
	3d Class. Posts remote from the ocean and inland seas..	14	11	7	12	45
	1st Class. Coast from Delaware Bay to Savannah.....	21	11	8	16	57
	2d Class. South-western Stations.....	46	18	10	20	92
Sou.	1st Class. Posts on the Lower Mississippi.....	20	9	4	11	47
	2d Class. Posts in the Peninsula of East Florida.....	14	9	8	6	39
Average,		20	12	8	12	53

This result is obtained from the observations made at Key West. At Fort Brooke, Tampa Bay, it is 16°.49.

RATIO OF PHTHISIS PULMONALIS.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. Nor'n.	1st Class. Posts on the coast of New England,.....	2	3	2	3	9*
	2d Class. Posts on Northern chain of Lakes,.....	3	2	2	2	9
	3d Class. Posts remote from the ocean and inland seas,.	2	1	1	1	5
	1st Class. Coast from Delaware Bay to Savannah,....	4	5	2	3	13
	2d Class. South-western stations,.....	3	3	4	2	11
	1st Class. Posts on the Lower Mississippi,.....	3	3	2	2	9
	2d Class. Posts in the Peninsula of East Florida,.....	2	2	2	2	9
	Average,	3	3	2	2	9

Northern Region of the United States.	Ratio of cases per 1000 of mean strength.					Deaths.				
	Mean Strength.	Catarrh and Influenza.	Pneumonia.	Pleuritis.	Phthisis Pulmonalis.	Total.	Catarrh and Influenza.	Pneumonia.	Pleuritis.	Phthisis Pulmonalis.
Atlantic Posts,.....	3130	233	22	26	9	290	1	1	15	140
Posts on the Lakes,.....	5973	300	19	30	9	358	4	9	65	12
Posts remote from the Ocean and the Lakes,.....	12604	552	17	28	5	602	3	1	22	1
Total,	21707	439	18	28	7	490	1	8	1	40
Southern Region.										
Coast from Del. to Savannah,†....	3199	271	25	32	13	341	1	1	19	196
South-western Stations,.....	11140	290	39	52	11	392	31	2	61	2
Posts on the Lower Mississippi...	3331	218	22	28	9	277	2	2	10	178
East Florida,.....	4607	143	15	24	9	191	1	1	9	131
Total,	22327	246	29	40	10	236	34	6	99	2

We cannot note the exceedingly low ratio of pulmonary disease in the peninsula of Florida, without being struck with the propriety of the remarks upon that region. "Possessing an insular temperature, not less equable and salubrious in win-

*As fractions are not given, and as the mean strength of each quarter varies, the annual results do not always correspond with the total of the quarterly ratios."

†Fort Mourée, as before, so far as pulmonary diseases are concerned, is excluded from this class. There are reported 102 deaths, of which four arose from influenza, eight from pneumonia, and seventeen from phthisis pulmonalis."

ter, than that afforded by the north of Europe, it will be seen that invalids requiring a mild winter residence have gone to foreign lands in search of what might have been found at home. Florida therefore merits the attention of physicians in our northern states; for here the pulmonary invalid may exchange for the inclement season of the north, or the deteriorated atmosphere of a room to which he may be confined, the mild and equable temperature, the soft and balmy breezes, of an ever-green land. Instead of that feeling of loneliness and abandonment which often casts a gloom over the sensitive mind of him who goes to foreign lands in search of health, he finds himself still among his fellow-citizens with whom he is bound by the common ties of language, laws and customs; and should he require a physician the difficulty of communicating with a foreigner, perhaps by means of an interpreter, a circumstance peculiarly vexatious to an invalid, is not here presented."

The statistics of rheumatic diseases do not exhibit the same immunity for the south :—

RATIO OF RHEUMATIC DISEASES.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Nor'n.	1st Class. Coast of New England,.....	24	28	29	30	110
	2d Class. Posts on Northern chain of Lakes,.....	41	37	36	38	151
	3d Class. Posts remote from the ocean and inland seas, ..	45	48	37	34	166
Mid.	1st Class. Coast from Delaware Bay to Savannah,.....	37	36	27	24	126
	2d Class. South-western Stations,.....	36	31	20	27	112
	1st Class. Posts on the Lower Mississippi,.....	28	16	22	23	90
Sou.	2d Class. Posts in the Peninsula of East Florida,.....	38	23	30	26	119
	Average,	36	31	29	29	125

In malarial diseases and some others of kindred character, as might be anticipated, the ratio of cases in the south and south-west greatly exceeds that of the north:—

RATIO OF INTERMITTENT FEVER.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Nor'n.	1st Class. Posts on the coast of New England,....	2	15	11	9	36
	2d Class. Posts on Northern chain of Lakes,.....	13	73	77	36	193
	3d Class. Posts remote from the ocean and inland seas, ..	21	34	57	40	151
Mid.	1st Class. Coast from Delaware Bay to Savannah,.....	41	71	158	101	370
	2d Class. South-western stations,.....	101	129	305	197	747
	1st Class. Posts on the Lower Mississippi,.....	62	77	170	90	385
Sou.	2d Class. Posts in the Peninsula of East Florida,.....	52	105	244	128	520
	Average,	45	75	156	93	368

RATIO OF REMITTENT FEVER.

Divisions.	Systems of Climate.	Ratio of cases treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. Nor'n.	1st Class. Posts on the coast of New England,.....	3	9	8	6	26
	2d Class. Posts on Northern chain of Lakes,	3	6	21	4	33
	3d Class. Posts remote from the ocean and inland seas, ..	2	3	13	6	24
	1st Class. Coast from Delaware Bay to Savannah,.....	3	20	110	48	181
	2d Class. South-western Stations,....	12	19	104	38	180
	1st Class. Posts on the Lower Mississippi,.....	17	47	86	56	196
	2d Class. Posts in the Peninsula of East Florida,.....	9	20	55	33	102
	Average,	7	15	58	22	101

RATIO OF SYNOCHAL FEVERS.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. Nor'n.	1st Class. Posts on the coast of New England,.....	12	14	6	11	43
	2d Class. Posts on Northern chain of Lakes,.....	4	5	4	3	16
	3d Class. Posts remote from the ocean and inland seas, ..	11	13	16	6	45
	1st Class. Coast from Delaware Bay to Savannah,.....	8	6	6	7	27
	2d Class. South-western Stations,.....	2	4	14	5	25
	1st Class. Posts on the Lower Mississippi,.....	25	15	3	14	60
	2d Class. Posts in the Peninsula of East Florida,.....	2	2	5	10	18
	Average,	8	8	10	7	33

RATIO OF TYPHUS FEVERS.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. Nor'n.	1st Class. Posts on the coast of N. England,.....	2	2	1	5
	2d Class. Posts on Northern chain of Lakes,.....	1	.5	.7	1.8	4
	3d Class. Posts remote from the ocean and inland seas, ..	.3	.1	.4	.08	.9
	1st Class. Coast from Del. Bay to Savannah,.....	.7	.3	1.2	1	3
	2d Class. South-western stations,.....	.2	1	1.4	1.3	4
	1st Class. Posts on the Lower Mississippi,.....	2	6	3	3	13
	2d Class. Posts in the Peninsula of E. Florida,.....	.25	.7
	Average,	.5	1	1	1	3.5

RATIO OF DIARRHŒA AND DYSENTERY.

Divisions.	Systems of Climate.	Ratio of cases treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. Nor'n.	1st Class. Posts on the coast of New England,.....	14	26	108	22	170
	2d " Posts on Northern chain of Lakes,.....	34	54	121	41	253
	3d " Posts remote from the ocean and inland seas,.	32	54	163	56	305
	1st Class. Coasts from Delaware Bay to Savannah,....	41	133	204	65	455
	2d " South-western Stations,.....	62	185	223	121	597
	1st Class. Posts on the Lower Mississippi,.....	126	135	117	72	456
	2d " Posts in the Peninsula of East Florida,.....	111	136	125	124	495
	Average,	54	107	166	75	405

As the preceding tables have been constructed from the quarterly sick report, from the several posts, extending over a period of ten years; as they comprise the whole of the United States and Territories, and are based on an aggregate mean strength of more than 47,000, the numerical results must be viewed as sufficiently close approximations to truth for all practical purposes.

We have not time to follow out the interesting remarks on epidemic cholera, scorbutus and dengue, or those upon the laws of morbidity and mortality, in the United States' Army, as compared with the results obtained in other countries, or those upon endemic influences in general, but must conclude by commending the work to our readers, not only as a new book but as a valuable one.

Selections from Foreign Journals.

ANATOMY AND PHYSIOLOGY.

On the Anterior Columns of the Spinal Cord. By Dr. STILLING, of Cassel.—In frogs, the division of the white substance of the anterior part of the spinal cord, if the gray central substance be not injured, does not prevent the influence of the will upon the muscles which are supplied with nerves from below the wounded part. For a time the frog remains dull and as if asphyxiated; but he soon begins to move, and at length succeeds in obtaining sufficient power over his hind legs to leap for some distance with them.

Van Deen had already shewn that sensitive impressions are conveyed through the posterior gray matter; and these seem to prove that the influence of the will is conveyed through the anterior part of the same substance; for if the incision be carried through the latter, all power of voluntary motion is lost.—*Oppenheim's Zeitschrift für die gesammte Medicin.* Januar, 1842.

Physiology of the Saliva.—The following is the summary of a series of papers on the physiological uses of the saliva:

Active uses. 1. To stimulate the stomach and excite it to activity by contact.—2. To aid the digestion of food by a specific action upon the food itself. [The author here adds in note, that during the act of assisting the digestion of food, *the saliva is itself digested.*] 3. To neutralize any undue acidity in the stomach by supplying a proportionate alkali.

Passive uses. 1. To assist the sense of taste. 2. To favour the expression of the voice. 3. To clear the mucous membrane of the mouth, and to moderate thirst.—Dr. WRIGHT, *Lancet*, No. viii. May 21, 1842.

Physiological results of Extirpation of the Salivary Glands. By Dr. BUDGE.—Litmus paper, introduced into the mouths of a considerable number of rabbits, was changed into a deep blue colour. The same was the result in the case of dogs and cats, without any exception. A cat was deprived of food during two days and half, and a dog during one day; yet in both cases was the above change in the litmus paper not the less marked. A rabbit and cat had both their nervi vagi cut across: in both animals, till the moment of death, an alkaline reaction of the saliva was manifested. The cat lived till the fourth day. A dog had both its parotid, both its submaxillary, and both its sublingual glands extirpated; yet, to the astonishment of the author, the reaction was still alkaline in as great a degree as before. The glands themselves, after being washed, so as to free them from all traces of blood, were cut into and tested: the reaction was alkaline, but not in so

great a degree as when the paper was introduced into the mouth. The animal quite recovered, and during the four weeks which it was permitted to survive, litmus paper introduced into the mouth, was always tinged blue. It was killed, and on examination a small quantity of food was found in its stomach. One bit of litmus paper laid on the stomach remained unaltered in colour; another piece became slightly reddened. The acid reaction seemed less than usual; but the author adds, that in dogs whose glands had not been extirpated he has often noticed very faint traces of acid. The results in a cat, which survived the operation four weeks without the smallest apparent injury, were nearly identical.

From these experiments the author infers that the spleen is not the only gland which can be extirpated without destruction of life. Yet no one can suppose that the salivary glands are useless. We must therefore conjecture that certain glands supplement each other; and that in the case of the removal of the salivary glands the pancreas, perhaps, eliminates the fluid which these glands usually do. It is known for certain that even the urinary secretion cannot remain in the blood when the kidneys are extirpated, and that the stomach endeavours in this case to eliminate, and *does* eliminate, genuine urine, though not, of course, in quantity sufficient for the purposes of life.

Although, according to experiments and observations on the human subject, the saliva, after eating, manifests an alkaline reaction, yet section of the vagus in brutes produces no change. The sympathy between parts supplied by the vagus and those supplied by the trigemini cannot here be taken into consideration. It is possible that this sympathy between the stomach and salivary glands may take place through the spinal branches received by the parotid.—*Medicinische Zeitung*, No. xviii. Mai 4, 1842.

Functions of the Spinal Cord in Cold-blooded Animals.—The object of the author of this paper is to prove that we are not justified in attributing to the reflex function of the spinal cord, many of those movements which are seen in frogs and other cold-blooded animals after decapitation. We cannot but consider, however, that his arguments are insufficient. In the first place he states it as an established fact that no cineritious matter has been detected in the spinal cord of frogs and other reptiles. We are not aware of the authority on which this assertion rests; and we have no hesitation in saying that it is virtually untrue, for though no nervous matter having the cineritious colour may be present there, yet a substance having a *structural* correspondence with that which is found in the spinal cord of warm-blooded animals undoubtedly exists there. Dr. Paton adduces many experiments which appear to him to prove that not only sensation but perception and volition remain in the spinal cord of frogs after the removal of the brain and medulla oblongata,—a position in which we apprehend that few will concur with him. His arguments are based solely on the *adaptiveness* of the movements performed by the animals, which adaptiveness, being equally great in actions which are universally acknowledged to be automatic, cannot be relied on as a test.—There is no doubt that it is more remarkable in the cold-blooded vertebrata than it is in the higher classes; but this corresponds with the general fact that the influence of the brain on the motor acts diminishes as we descend the scale, and at last almost ceases. Among the invertebrata we find the most perfectly *adaptive* ac-

tions performed by ganglia, in which volition cannot be imagined to exist, and in which we have no reason to suppose that sensibility resides. Is it to be imagined for example, that when the nervous column of a centipede has been cut into several divisions, each becomes a distinct centre of consciousness and will,—an independent *ego*,—because the legs move when in contact with a hard surface? Or to go to the vegetable kingdom, is the perfect adaptiveness of the movements of the *dionæa* to be taken as an indication of its consciousness and voluntary power?—Without enlarged comprehensive views on this subject, we do not think that right conclusions are likely to be attained.—Dr. PATON, *Edinburgh Medical and Surgical Journal*, April, 1842.

On the Nerves of the Hard Palate. By Professor BOCHDALEK, of Prague.—As soon as the branches of the posterior palatine nerve have passed through their foramen they separate. Three or four small branches go backwards and inwards to the glands of the soft palate; others somewhat larger pass outwards to the gum by the last teeth; and the largest fasciculus, composed of five or six branches, goes forwards, gradually diverging and forming a kind of network over the whole arch of the palate. Its outer margin lies in the gums of all the teeth, and the inner forms the most varied plexuses at the middle line, with corresponding branches from the nerve of the other side. The number of filaments into which these five or six branches divide is indeed surprising. They lie even in several layers one over another, and form close networks, so that the sum of the branches seems to surpass by very far that of the trunks. Some of their filaments pass between the teeth to the anterior part of the gum, and there unite with the terminal branches of the supra-maxillary nerve which penetrate the anterior part of the alveolar process. But innumerable branches are lost in the glands of the hard palate and in their acini.

The author suggests that the purposes served by these nerves are, to give the energy necessary to so much reproduction as is constantly going on in the hard palate, to give sensibility to the mucous membrane of the lower part of the nasal cavities, and perhaps to add filaments to those of the superior maxillary nerve in the substance of the jaw. But higher uses he thinks they have in rendering the hard palate a delicate organ of touch: and he urges it as evidence for Panizza's view of the glosso-pharyngeal nerve being the exclusive nerve of taste, that its filaments are sent to the soft palate in which there is a distinct sense of taste; while the hard palate, which has no such sensibility, is supplied by the fifth nerve alone.—*Medicinische Jahrbucher des K. K. Oesterr. States.* Jan. 1842.

MATERIA MEDICA AND TOXICOLOGY.

On the External Application of Croton Oil. By M. BOUCHARDAT.—Whenever it is required to use this method of counter-irritation, M. Bouchardat strongly recommends a plaster which has been much used by M. Chomel at the Hotel Dieu, and which is thus prepared: Four parts of diachylon-plaster are melted at a very gentle heat, and while it is half liquid one part of croton oil is mixed with it, and

the mixture is then spread in a thick layer on calico. Pieces cut from this may be applied to the skin, like ordinary sticking-plaster, and quickly produce an active irritation.—*Bulletin General de Therapeutique*. Mars, 1842.

M. Velpeau's Mode of administering Cubebs and Copaiva in Gonorrhœa.—Being desirous of avoiding the effects of copaiva on the stomach, I made several trials of this remedy in the form of enema. From one to four drachms of copaiva were mixed with four ounces of gum emulsion, containing some camphor and opium.—I began with a drachm of the copaiva, and increased the dose by a drachm every day; the enema was thrown up thrice daily. There was a great obstacle, however, to this mode of treatment. Most of the patients were unable to keep the enema; but those who did were cured in three or four days. From these facts, and others observed by different surgeons since, I am inclined to think that this mode of giving the balsam, when the patient can retain it, is as efficacious as any other.

The best method, gentlemen, is to unite the two substances together. The following is the formula for the mixture which I have been in the habit of employing for several years:—Two drachms of copaiva, four to six drachms of cubebs, and two grains of opium, are made up into a paste with magnesia; this is divided into six parts, and taken in two days. Three doses are generally sufficient to effect the cure. In some cases the discharge is arrested after the second day; but you must not suspend the remedy as soon as this occurs, for the discharge would return in greater abundance. You must continue your treatment for some time. After the first dose, allow the patient to rest for a day; on the fourth day you give another dose, and on the seventh a third. Some writers pretend that the use of copaiva and cubebs is apt to induce metastasis of the inflammation to the joints, &c. I do not think that this is the case; a mere coincidence has been confounded with an effect. It is true that arthritis frequently occurs in persons labouring under gonorrhœa, and the discharge may be a predisposing source of this affection; but we are not to conclude from this that gonorrhœal arthritis arises from the use of cubebs and copaiva. The occurrence of a rash, somewhat similar to measles, is more evidently connected with the administration of these remedies; but the effect is of so little consequence that it scarcely deserves notice.

It is impossible to deny that the remedies just mentioned exercise a certain influence on the urinary organs. The urine is strongly impregnated with their odour; some writers pretend that they act as revulsives; but I cannot admit this, for their anti-gonorrhœal effect is greater in proportion to their want of action on the digestive tube. In a word, the best constitutional treatment of gonorrhœa consists in the administration of copaiva and cubebs united together.—*Provin. Med. Jour.* April 16, 1842.

Aconite Plaster in Rheumatism. By JOSEPH CURTIS, M. D.—Since my communication appeared in the *Lancet* upon the external use of the tincture of aconite in cases of rheumatism, I have adopted a new mode of using it, namely, in the form of a plaster. The following is the way in which I make it:—

Take of the tincture of aconite ℥iv., evaporate to about ℥ss, or until it becomes of the consistence of oil. This should be spread with a paint brush upon one yard

of adhesive plaster half a yard wide, and dried. This plaster may be cut to any convenient size and shape, and applied to the part affected.

The effect of this plaster is so nearly the same as that of the tincture applied as before described, that it will not be worth while occupying your columns with cases. When first put on, its effects are much milder than those of the tincture; in fact, it produces so comfortable a glow, that I seldom find a patient in any hurry to part with it. I believe all its beneficial effects are generally produced in less than twenty-four hours; if allowed to remain on three or four days it will sometimes bring out a rash.—*Lon. Lan. April 2, 1842.*

Use of Drastic Purgatives.—Two cases are recorded in the “Bulletin Général de Therapeutique,” in which the continued use of drastic purgatives cured obstinate cutaneous diseases. The first, a poor, aged woman, who had been troubled with prurigo for upwards of two years, and had been under the care of a medical man, who had directed venesection, alkaline drinks and baths, milk diet, changed afterwards for as generous diet as she could procure; lotions prepared with bitter infusions; and finally, sulphur ointment, from all of which she derived only temporary benefit; was at last ordered by another practitioner to take the tartarised antimony, two grains for a dose. The first not producing any effect, she repeated it of her own accord, when its use was followed by free and abundant stools, but no vomiting. Relief following, the dose was repeated every eight or ten days, the same purgative effect being caused, and the disease gradually disappearing. At the end of three months the patient was cured.

The subject of the second case was a woman, fifty-six years old, a patient of Andral's, at la Charité, who was cured of psoriasis by repeated doses of German brandy, a drastic cathartic, composed of jalap and scammony infused in brandy, which equally produced frequent and abundant evacuations.

Mention is made incidentally of another patient of Andral's, who, while labouring under a severe attack of angina tonsillaris, was ordered a powerful cathartic, which produced more than sixty stools, the pulse falling from 104 to 76, and the patient was cured.—*Provincial Medical Journal. May 28, 1842.*

[The physician should, however, take care lest the remedy prove worse than the disease—many individuals would certainly not bear these large doses of drastics. *Med. Examiner, Phil.*]

PATHOLOGY AND PRACTICE OF MEDICINE.

Spontaneous Perforation of the Stomach.—A woman, twenty-six years of age, unmarried and hitherto healthy, was seized with an acute pain at the epigastrium, while putting on her stays. Dr. Thompson found her labouring under excruciating pain, which she described as existing at a point about an inch and a half to the left of the xiphoid cartilage. Leeches, cupping-glasses, camomile, and poppy, stupes, bran poultices were employed, along with a hip-bath, an aperient, and afterwards a sedative draught. The relief obtained was merely partial and temporary, and the woman died thirty-five hours from the commencement of the attack. In the outward appearance of the stomach, there was nothing to attract notice, but

on opening it, its surface was seen to be generally inflamed; and on closely examining it there was found an oval opening in the mucous membrane of the lesser curvature. The submucous coat was also similarly perforated; but the opening in the serous coat was not observable on the outer surface at first sight, but was only recognized (unless very closely inspected,) by passing a probe from the interior of the stomach. It was an oblique slit; and through it about a pint of the stomachic contents had passed into the cavity of the abdomen, causing diffused peritonitis—Dr. J. B. THOMPSON, *Med. Gazette*, No. 29, April 8, 1842.

Statistical Researches into the Etiology of Pulmonary Phthisis. By Dr. BRIQUET, of the Hopital Cochin.—This paper is founded on an investigation into various particulars connected with the history of 109 phthysical patients in whom the disease was far advanced, and likewise on data furnished by all the deaths from phthisis in the hospital between January 1st, 1838, and January 1st, 1841, being 182 in number.

The conclusions (for which only we have space,) at which M. Briquet arrives are :

1. That during the past three years one tenth more of men than of women have been received into the Hopital Cochin affected with phthisis : a result directly contrary to those obtained by MM. Lombard and Louis.

2. In at least a third of the patients phthisis was distinctly hereditary, and predisposition to the disease seemed more frequently to come from the father than the mother.

3. No immunity from the disease is afforded by the circumstance of being born of parents who are natives of the country, or by being brought up in the country.

4. Tall stature, a slender frame, an ill formed chest, and convexity from the root to the point of the nails are the only external characteristics of phthysical diathesis.

5. It occurred very seldom that the circumference of the upper part of the chest was less than that of the lower part : a fact directly contrary to the assertion of M. Hertz.

6. Those callings in the pursuit of which there is discomfort, want of exercise and of pure air present a greater number of phthysical persons than is to be found among those who pursue different occupations.

7. A third of these patients were more subject to catarrh than other persons, and were more sensible of cold.

8. In three fifths of the patients phthisis developed itself between twenty and thirty years of age, but more than two thirds of those whose parents had suffered from consumption became phthysical before their thirtieth year; while, of those whose parents had not been healthy, half did not show symptoms of phthisis till after thirty.

9. In four fifths of the patients there existed predisposition to phthisis, and in three fifths this predisposition was acquired.

10. Cold is the most powerful cause of the acquired predisposition; next to which are misery, privation, and distress of mind.

11. Phthisis is most frequent in cold seasons, and when there are many variations in the atmosphere.

12. Four tenths of the patients had not been exposed to the influence of any occasional cause of phthisis, but in most there existed a strong predisposition to the disease.

Five tenths had been exposed to and suffered greatly from some exciting cause, and this cause was in almost every instance cold and damp.—*Revue Medicale*. Feb. 1842.

Violent Hysteria in a Man.—This was a well-marked case, characterized by the most convulsive laughter, crying, &c. His strength was such that it required seven or eight men to hold him. There was great heat over the parietal bones, over which cold water was freely applied; and the heat on this region of the skull was generated so fast, that the cold water evaporated as if thrown on a hot substance, and rose in vapour. The man's age was twenty-six; he was small, weak, and effeminate, of an excitable temperament. It is not stated, as it ought to have been, whether he be married or not.—ALFRED SMEE, Esq., F. R. S., *Medical Gazette*, No. xxvii., March 25, 1842.

On the employment of the Sulphate of Alum in the treatment of some forms of Angina Pharyngea. BY M. CELESTIN PERRIN.—It is by no means unusual for catarrhal affections, especially in damp situations, to leave behind them a sort of habitual chronic catarrh of the fauces. In these cases the mucous membrane is much injected, of a deep red, sometimes thickened, and the mucous follicles are very apparent and much developed. An adhesive mucus covers the parts and provokes a frequent and troublesome cough to effect its expectoration. The employment of alum gargles, of various strength, in these affections has for some years been often resorted to. M. Petrequin, of the Hotel Dieu, has practised the insufflation of four parts of alum to one of sugar with great success; and M. Perrin has used the same means with similar results.

Encouraged by the good effects of the application in chronic cases, M. Perrin has had recourse to it in those which are acute. He mixes equal parts of alum and sugar, and blows them through a quill against the back of the pharynx. It is always necessary that the point of the quill should be even with the uvula, since otherwise the sudden descent of the velum palati may close the passage and scatter the powder on the back of the tongue, where it excites nausea and efforts at vomiting. Even in cases where the febrile symptoms run very high, the difficulty of swallowing is extreme, and the patients have on former occasions been depleted and subjected to very severe treatment, this application a few times repeated has seemed to effect a cure, and a great amelioration of the symptoms has followed its employment even once. Two cases are related in illustration, and the writer concludes by asking whether equally favorable results might be expected from this practice in cases occurring in dry and hot countries, or whether there is something peculiar in the anginas of damp and rainy climates, as Lyons, which renders them peculiarly amenable to this mode of treatment.—*Bulletin General de Therapeutique*. Mars, 1842.

SURGERY.

Abscess of the Iliac Fossa.—M. Barthielemey recommends in cases of extra-peritoneal abscess of the iliac fossa, the careful and repeated examination of the lumbar region, in order that, if positive indications of the collection of pus can be discovered there, an opening may be made, rather than allow the matter to make its way into the pelvis, where its presence may cause death. He adds, that the opening of abscesses there is neither difficult nor dangerous, inasmuch as the abscess itself interposes between the abdominal parietes and the peritoneum. After the operation the patient should be kept lying on his back, and a tent be passed into the opening, to be replaced next day by emollient injections—*Annales de Chirurgie*.

Dislocation of the Thumb. By M. RADAT.—This was a case of dislocation of the last phalanx of the thumb backwards. A soldier was running on a moist clay soil, when he slipped, and putting out his hand to save himself, his thumb stuck in the stiff ground, and, as it was thus fixed, he fell over it. The symptoms were, considerable shortening of the thumb, retroversion of the phalanx in the direction of extension, so that it formed almost a right angle with the metacarpal bone, immobility of the joint, and a prominence on the palmar surface. It was reduced in the following manner: A piece of stout bandage was taken with a hole in its middle, through which the thumb was passed; the two ends being then carried forwards, were strapped close down upon the dislocated phalanx, and extension made by pulling them while another person held the metacarpal bone, and a third pressed in the phalanx as soon as it was drawn nearly to the level of the joint.—*Gazette Medicale. Mars 12, 1842.*

Five Cases of Stone treated by Lithotrity.—The first patient, fifty-six years of age, required five sittings, seemed to have suffered very little from the operation, and was cured. The passage of the fragments of stone subsequent to the operations was not followed by any irritation. The second patient, aged thirty, required three sittings. In this case the pain attending the operation was trifling; but the first manipulation was followed by feverishness and inflammation of one testicle, which rendered a postponement of further proceedings necessary, from the 1st to the 18th of June; cure. In the third case, which was that of a female whose age is not stated, three sittings were required; cure. In the fourth case, that of a man sixty-three years of age, who had a stone measuring seven lines, the operation, performed on the 12th of October, was accompanied with little pain; but on the 16th the urine deposited a considerable quantity of viscid, transparent mucus, which gradually disappeared under the use of the oil of cubebs. The operations was repeated on the 7th and 25th of November, and the 5th, 19th, and 26th of December, without being again followed by catarrh of the bladder, or any other inconvenience; cure. But a year after, symptoms of stone reappeared, which were again removed after two lithotrical sittings; and the man being examined by three hospital surgeons, was found free from stones. The fifth was the only unsuccessful case. After lithotrity had been performed and fragments of stone removed, the bladder became so irritable as to make lithotomy necessary. This was performed, and three calculi as large as hazel-nuts, and numerous small, soft concre-

tions, were removed. But fresh symptoms of stone have since manifested themselves. This patient was a man of seventy-two, but healthy.—Mr. TEALE, *Prov. Med. and Surg. Journal*, No. xxiv., March 12, 1842.

MIDWIFERY.

Sore Nipples.—Velpéau in a late clinique after speaking of the more ordinary mild applications says, that in severer cases he uses lunar caustic or zinc lotion. Calomel applied locally he has also used with success. A correspondent of the London Lancet says he has used the tincture of catechu, applied twice a day with a camel's hair pencil, with success. The best remedy for sore nipples we have ever tried is that of Sir Astley Cooper, as given by Maunsell in that excellent little work *The Dublin Practice of Midwifery*—it is as follows :

R̄. Sub. Borat. Sodæ, ℥ij.
 Pulv. Cretæ. ppt. ℥j.
 Alkohol.
 Aq. Rosæ. ā. ā. ℥iij.—M.

To be applied every time the child nurses, which should not be too often. The nitrate of silver will "*act like a charm*" in some cases, but it will aggravate others. Nor is it possible, (so far as we know,) to tell before hand what cases will be benefited by it.

New Mode of accelerating Labour.—The practice consists simply, in imitating the influence of the child's head, or membranes on the natural passages, and thus producing expulsive efforts by reflex sympathy. This is accomplished by introducing the finger or fingers as far as the point of the os coccygis, and passing them downwards along the whole surface of the vagina, so as to give the sensation of distension.—Mr. STANILAND, *Provincial Med. and Sur. Journal*, No. xxvi. March 26, 1842.

Miscellaneous Articles.

[It affords us great satisfaction to comply with Dr. Oppenheim's request by inserting the following circular.]

The frightful conflagration which visited Hamburg in the beginning of last May has not spared the premises of the MEDICAL UNION, whose library, the fruit of twenty-six years' assiduous collection, exists no more! Such a loss cannot be repaired by pecuniary contributions. Complete series of a great number of German, French, English, American, and Indian journals and works, rare editions of the older authors, a multitude of ancient and modern medical and chirurgical encyclopædias and lexicons in various languages, scarce and curious prints, &c. are not only lost, but are no longer procurable by purchase; while many hundred volumes

of old dissertations, classified according to subjects, cannot be replaced in any manner. In this strait the Medical Union earnestly requests advice, not only from its foreign members, but from all its medical brethren, where and in what manner it may once more gradually acquire possession of a library at the least possible expenditure of money. Any communication on this subject, in post paid letters or through the medium of the booksellers, addressed to "The Directors of the Hamburg Medical Union;" or to the undersigned, will be received with the sincerest thanks. The Editors of the Medical Journals are requested kindly to give insertion to this notice in their respective publications.

F. W. OPPENHEIM, M.D.

Hamburg, May 16, 1842.

Remarkable Case of Suicide.—A woman aged 29, and previously in robust health, was found dead in her apartment. In accordance with the provisions of the anatomy act, her body was received by Dr. Handyside for dissection, and was by him, along with an assistant, carefully examined. Nothing was found sufficient to account for the death; and Dr. Handyside believing her to have died of "simple apoplexy," had the lips sewed together, proposing to reserve the body for his lectures. About two months after, while about to demonstrate on this subject, the muscular structure of the pharynx, Dr. Handyside introduced his finger into the back part of the mouth, in order to stuff that cavity with hair; but found this space preoccupied by a dense foreign substance, apparently round in form, and impacted between the roof of the tongue and the soft palate, so very firmly, as to have cut off the supply of air into the lungs during life, by forcibly closing the mouth and posterior nares. The materials of this plug consisted of portions of soft cotton, called spindle ends. Some of this cotton, the woman had untwisted and rolled up very closely, coiling over it two strips of flannel. Finally, she had fastened these materials together with a large rough pin. On examination, the soft palate presented to view, on the left side, (the one corresponding to that portion of the plug, where the rough head of the pin projected,) a small but deep laceration, and which notwithstanding the long interval, was surrounded by a circumscribed patch of ecchymosis, still of a vermilion hue. The right side of the soft palate, the anterior fourth of the tongue and the hard palate opposite to it, the epiglottis, and the arytenoid cartilages, which appeared to have been violently separated by the last expiration, also exhibited ecchymoses.

The author infers from the above case, the necessity in cases of medico-legal enquiry, of paying attention to the natural apertures. He also calls attention to the length of time that the appearance of recent ecchymosis lasted.

The author cites a somewhat similar case, described by Dr. Wagner, as having occurred in Berlin. It was that of a criminal who was found dead in his cell.—Another case also occurred about five years ago, in Edinburgh.—Dr. HANDYSIDE, *Edinb. Med. & Surg. Journal*, No. 151, April 1, 1842.

[An ancient and much more remarkable case of the same mode of suicide is related by Seneca, and commented on in the style of thought so peculiar to that great author.

"Nuper in ludo bestiariorum, unus e Germanis, cum ad matutina spectacula pararetur, secessit ad exonerandum corpus; nullum aliud illi dabatur sine custode

secretum ; ibi lignum id, quod ad emundanda obscœna adhærente spongia positum est, totum in gulam farsit, et vi præclusis faucibus spiritum elisit. Hoe fuit morti contumeliam facere ; ita prorsus. Parum munde, et parum decenter. Quid est stultius quam fastidiose mori ? O virum fortem ! O dignum, cui fati daretur electio ! Quam fortiter ille gladio usus esset. Quam animose in profundam se altitudinem maris, aut abscissæ rupis, immisisset. Undique destitutus invenit quemadmodum et mortem sibi præberet et telum ; ut scias ad moriendum nihil aliud in mora esse, quam velle."—*Epist.* 70.]

In the July number of the New York Medical Gazette the editor says that the publication of the Gazette would cease with that number.

Revista Medica Brasileira, Jornal da Academia Imperial de Medicina do Rio de Janeiro.—It is announced in the April number of this journal that Sr. Dr. E. Joaquim da Silva Maia, in consequence of other engagements which require his attention, cannot continue his labors as its editor, and that Sr. Dr. Francisco de Paula Menezes has become his successor.

Necrology.

Mors autem vellens, vivite, ait, venio.

VIRGIL. *Copa.*

We greatly regret to have to record the death of Sir Charles Bell, which took place suddenly on the morning of the 29th ult., at Hallow Park, near Worcester, the residence of Mrs. Holland, whom the deceased and Lady Bell were visiting on their way to Malvern.

Sir Charles had been subject to pains about the chest of a spasmodic nature, and latterly assuming the characters of angina pectoris. He had been very unwell at Manchester a short time before, and had suffered much from pains in the stomach during his visits at Hallow ; but appeared quite as well as usual on the 28th, and had been out for a considerable time during the day. At night the pains again became severe, but no danger was apprehended until 8 o'clock on the morning of the 29th, when he became rather suddenly very quiet, and Lady Bell, greatly alarmed, sent for Dr. Carden, of Worcester, who, on his arrival, found him quite dead, with the appearance of life having been for some time extinct.

Sir Charles was 67 years of age, and, with the exception of the complaint which proved fatal, retained considerable vigour and activity. He was out sketching on the 28th, being particularly pleased with the village church, and some fine trees which are beside it ; observing, that he should like to repose there when he was gone. On Monday last, being just four days after this sentiment had been expressed, his mortal remains were accordingly deposited beside the rustic graves which had attracted his notice, and so recently occupied his pencil.—*Lond. Med. Gaz.* May, 1842.

Baron Larrey, the illustrious surgeon and friend of Napoleon, died at Lyons, on the 25th July, 1842, aged 76 years.

The Richmond Enquirer announces the death of John P. Emmett, Esq., the able Professor of Chemistry in the University of Virginia. He was the son of the distinguished Thomas Addis Emmett, and was a man of eminent talents and learning.

Daniel Oliver, M.D., LL. D., lately Professor in the Medical College of Ohio, died at Cambridge, Mass., on the first of June, 1842. He was a man of mild and gentlemanly deportment, and was never known to deviate from the upright course of a christian physician. He was distinguished for erudition, delighting much in the works of the Greek and Latin poets, philosophers, and historians, in their original languages, and was equally acquainted with German and French authors.—A calm, dignified manner, that commanded both respect and silent attention, characterized his public exercises as Professor: his pupils felt that they were guided by an honest man, who knew all that was known of the subject on which he discoursed. As a member of society, his dealings with others were dictated by justice, religion, and humanity. Though easily persuaded and yielding to the requests or persuasions of others, as to matters merely indifferent, in other cases, especially where honor or conscience was concerned, he was well known to be perfectly inflexible. A few days before his death, he assured a friend, that in his situation he found the consolations of religion unspeakable.

Aside from a variety of scientific and literary productions of which he was the known author, his large work on physiology, widely circulated in this and other countries, will be a permanent record of his fame.—*Bost. Med. & Surg. Jour.*

Extract from a letter received by the Secretary of the Navy from Commodore CHARLES W. MORGAN, dated Port Mahon, March 2, 1842:

“In the discharge of a melancholy duty, I announce to the Department the decease of Assistant Surgeon RICHARD J. HARRISON, recently attached to the sloop of war Fairfield.

“The professional talent of this young officer, and his many manly virtues, had universally endeared him to his fellow officers, and gave the highest promise of his future usefulness in the service of his country.

“The mortal remains of the deceased were yesterday interred at the American burial ground at Mahon with the military honors due to his rank.”

Died, May 28th, 1842, at his residence in Rutherford county, Tennessee, Dr. Samuel Hogg, one of the oldest and most eminent physicians in that state.

Dr. Thomas Eaton, the distinguished geologist, died recently at Troy, N. Y., aged 65.

In addition to the foregoing, the foreign Journals announce the deaths of Drs. Yelloly and Blake of England, the latter the author of the work on Delirium Tremens; of Hann of Berlin; of Fricke of Hamburg; and of Devergie of Paris.

THE MARYLAND MEDICAL AND SURGICAL JOURNAL.

December, 1842.

Original Communications.

ART. I.—*Hygienic Remarks on some of the Causes of Prevalent Diseases of the Western States.* By WM. MAXWELL WOOD, M.D., U. S. Navy.

DURING a professional residence in one of our western states, it became manifest to me, that, in several of the prevailing habits and customs, within the control of the people, may be found extensive influences destroying the health, and impairing the comfort, happiness, and prosperity of those large sections of our country in which such habits and customs exist. I am induced to direct attention to these sources of disease, from a belief that, by the influence and injunctions of the Medical Profession, they can be greatly lessened and the condition of the people correspondingly improved.

The general prevalence of bilious-remitting fever, throughout the west, is well known; and were there no more general causes for its existence, it would find fruitful sources in the character of the popular dwellings, the log-cabins of the country. During

the prevalence of a morbid, atmospheric influence, these habitations present all the circumstances to give it efficiency and to generate a virulent endemico-epidemic; and in localities and seasons of a more healthy character, they combine all the most favorable circumstances to originate malaria within themselves. My attention was first directed to this subject by observing that, in the neighbourhood of villages, a far greater proportion of bilious cases occurred among the tenants of log-cabins, than among those of dwellings which were of a different class; and by the universal remark that in unhealthy seasons, the towns were more healthy than the country, and that these cabins were almost the exclusive seat of disease in seasons and situations of general health.

Setting aside the evidence of the foregoing observations, what we know positively upon the subject of malaria, its sources and laws, will show that the materials and structure of log-cabins must necessarily combine all the circumstances to generate the most active condition of this morbid influence. Emanating, in most cases, if not exclusively, from vegetable decomposition, its history has shown, that fevers of the greatest virulence have been traced to a limited space of vegetable decomposition. We know that such was the case with the yellow fever which was so fatal in Philadelphia in 1793, it having been discovered, by the searching observation of Dr. Rush, to emanate from a mass of putrid coffee. We have additional evidence of this fact from the frequent records of diseases of malaria originating on ship-board where cleanliness has been neglected, even when surrounded by the pure air of the ocean. So careful are we in the public service to guard against all the sources of vegetable decomposition, that every stick of wood required for fuel on board of our public vessels, although dry and seasoned, is stripped of its bark before going on board, in order that the fragments may not by accumulating in the hold and its recesses generate disease.

Admitting then, that bilious-remitting fever may originate from vegetable decomposition of limited extent, we need scarcely look

to a more general cause for the autumnal pestilence of the western country, than is afforded by the common dwellings of the inhabitants; and the wonder is that any human constitution can become habituated to their morbid emanations.

In the erection of these structures, which is often but the work of a few hours, the logs are taken green from the forest, wet with their sap and juices, and covered with their bark. Of such materials the habitation is constructed, consisting generally of but one apartment. Simultaneous with its erection, the process of decay commences, facilitated by the heat and moisture consequent upon its numerous inhabitants and their domestic operations. The materials, however, are not the only sources of evil. The mode of structure not only adds to the efficiency of these, but begets new ones. The foundation-logs, instead of being elevated upon supports, so as to give a free passage to air beneath the dwelling, and afford facilities for the removal of filth, are laid in direct contact with the ground. Across these logs the puncheon-floor is laid, leaving a space of from twelve to eighteen inches between it and the ground. The puncheons which compose the floor, are logs split into flat pieces and partially smoothed on the upper side by the axe. Of course they are not very nicely adapted to each other. Through the wide crevices, fragments of bread, vegetables and fruit pass freely into the receptacle beneath. Every time the cabin is scrubbed out water is added to this mass. In warm weather all the contingencies of malaria are thus combined in the most concentrated manner. I was once informed by a housekeeper, noted for the neatness with which her cabin was kept, that for a day or two after scrubbing it out during warm weather, the smell from beneath the floor was intolerable.

When the emanations from such a bed are added to those produced by the constantly decaying materials of the dwelling, it is impossible that a section of country within the range of warm weather, and in which such log-cabins are the principal dwellings, shall be free from diseases of malaria. It has long been a matter of observation, that our new country becomes more healthy as it is cleared and cultivated. While this salutary change may be greatly owing to the altered condition of the surface of

the earth, may it not also be in some degree attributed to the improved class of dwellings which accompany increased cultivation?

In attacking log-cabins, and exposing them as probable sources of disease, we are contending with several influences, which, besides the facility of their erection, powerfully incline the prejudices of the people in their behalf. These dwellings are associated with the freedom and romance of forest life; they have become symbolical of enterprize and adventure, and they are now the type of a powerful and widely extended political party. All those claims in their behalf, however, are invalidated if they are found to be sources of the prostrations and miseries of disease, and to call down upon their occupants the paralyzing influence of "doctor bills." There would be no object in pointing out the deleterious influence of log-cabins, if no other kind of dwelling could be substituted for them, and their continuance was a matter of necessity; but, such is not the case. Ignorant of the tendencies we have attempted to exhibit, many families continue to reside in log-cabins, under the penalty of annual disease, whose means would afford them any kind of dwelling they could reasonably wish; and, except in the most remote settlements, frame-tenements could be erected with but little more cost and almost as much speed as log-cabins. Even where these latter are the only dwellings which can be constructed, their dangers might be much diminished, by elevating the foundation-logs from the ground and stripping the bark from all of them.

Another class of diseases which prevails to a frightful extent through our western country, is that affecting the digestive organs. We are generally accustomed to associate robust health and vigorous constitutions with the labors and pursuits of agricultural life. It was, therefore, with much surprise that I observed the sallow countenances and emaciated forms of great numbers of the country people in early adult life, and that I found them to be suffering from all the protean forms of dyspepsia and injuries to the mucous membrane of the stomach, which generally result from an epicurean and sensual mode of life.

A familiarity with the sectional *cuisine* readily accounted for

these morbid conditions. The general character of the preparation which the food undergoes being that which has been shewn to tax the digestive powers to the greatest extent, and which if continued most surely breaks them down early in life. The frying pan is the chief kitchen-implement and lard the most abundant material. Every meal, breakfast, dinner, and supper is a fry; potatoes, apples, pumpkins, pork, ham, chicken, beefstakes, are fried, or rather stewed in lard until it imbues and flavors their whole substance. Even the delicate and juicy venison with which the rifle abundantly supplies every man's cabin, instead of having its flavor and digestibility retained by a simple broiling, is fried in boiling lard until the greasy fluid penetrates and toughens every fibre. When any but corn-bread is used, it is hastily prepared upon the spur of the moment. It consists of a combination of flour and lard, baked into cakes as heavy as lead, and making about the same demand upon the digestive powers. As long as such continues to be the habitual diet of the country, its inhabitants can never be characterized by vigorous health.

That such is the diet is well known to every one who has had the opportunity of travel, or residence, for observation; while every practitioner of medicine, I feel assured, can testify to the great prevalence of chronic gastric diseases among the agricultural population, attended by the train of suffering peculiar to such diseases, and complicating the treatment of every other morbid affection which may be engrafted upon them.

My own experience convinces me that the great influence of the prevailing diet upon the general health of the west is much over-looked, and that, a change in the culinary habits of the people, the substitution of the pot and the gridiron for the frying-pan, and of water for lard, would contribute more to the comfort and prosperity of the people than is at first apparent. I have not taken into consideration the agency of alcoholic drinks in producing these gastric disturbances, because so far as my observation extends, the inhabitants of the country are remarkably free from the intemperate use of such drinks. The majority of cases which came to my knowledge could, from the habits of the individuals, have had no such origin.

If contingencies, so intimately associated with man's existence as his place of constant habitation and his daily food, have an adverse bearing upon his health, the extent of the evil can scarcely be estimated; and the importance of making the changes, essential to a more salutary condition, cannot be too strongly inculcated. Besides the influences which it has been the object of the foregoing remarks to show, bear upon every individual of the community in which they exist; there are others requiring attention, whose injurious action is confined to the more fragile female organization.

Prolapsus uteri, among the women of the new states, presents itself to an extent so shocking as to indicate some sectional causes. So numerous are the cases that a pessary, with those who use it, is almost as essential an appendage of a doctor's saddlebags as a pill-box. I found no difficulty in accounting for the frequency of this disease when I became familiar with the usages of the country in the conduct of a labor, and the subsequent management of the woman. It is a matter of religious vigilance, during the progress of a labor, to harass the patient by all manner of savage and violent aid; particularly, however, by placing her in straining and fatiguing positions; by making her walk about, placing her upon her knees, or upon those of her husband; and by no manner of means permitting her to remain quiet in bed.

In the neighborhood of towns and villages, where the people have had access to informed practitioners, these barbarisms are to some extent done away with; or, at least, a proposition to place the woman in bed is not received with universal horror. But in the more remote country districts, where labors have been generally managed by old women, it is a daring innovation in the medical practitioner, who may by chance be called to such a case, to attempt to conduct it in a more rational and less fatiguing manner. In such isolated communities, the confinement of a neighbor is an important and highly exciting event. It draws together the matrons from miles around, until the single apartment of the cabin is crowded; and in fine weather several are seated around the door. Each one of these deems it a contingency of her age, sex, and the number of children she has borne, to know all about

the case in progress; but lest she might display ignorance, she confines the display of her knowledge to signs and looks, until a proposition is made to place the patient in bed. So strong is the prejudice upon this subject, that, immediately, the tongues of the whole party are unloosed, the change is looked upon as intolerable heresy, or as an evidence of ignorance and inexperience upon the part of the doctor; and he will require great firmness to bear himself and his patient successfully through the contest.

A far more deleterious practice than the foregoing, and one which is perhaps the most efficient cause of prolapsus uteri, is the rivalry which leads to a rapid getting up. She who can, in the smallest number of days or hours, be about her active household duties is looked upon as the smartest woman in the settlement; and to remain a proper time in bed is regarded as a discreditable effeminacy.

Although these practices may not appear at once to be followed by evil consequences, yet if they ultimately lead to the production of prolapsus uteri, which none can deny, it becomes a most imperative duty of medical practitioners to discountenance them, and to expose their pernicious consequences. Unfortunately it is more easy to yield to the popular prejudice, and to do so often conduces to the popularity of the practitioner. But he who firmly bears out his own judgment, if he has no other dependance, may safely rely upon the gratitude of the most grateful moment of a woman's life, and may induce his patient to give her evidence in favor of his plan.

ART. II.—*Medical Notes on a Cruize of Circumnavigation; in the United States' Ship John Adams.* By JOHN A. LOCKWOOD, M.D., Surgeon, U. S. Navy.

[Part I.]

It is but reasonable to suppose, that the medical history of a voyage around the world would contribute in some degree to the stock of professional knowledge, if the diseases incident to the various ports visited, and their causes, be observed with care, and

narrated in a spirit of candor and truth. I trust, therefore, these imperfect notes even without any merit of execution, will repay a perusal from the interest of the subject.

The compliment of men belonging to the U. S. ship John Adams, a sloop-of-war of the first class, was about two hundred. The ages of the crew ranged from sixteen to fifty-five, averaging probably about thirty. Their places of nativity and former residence were of course various and irregular. Of their previous habits of life, we can speak with more accuracy, as unhappily but few men-of-war sailors are to be found who are not addicted to the vice of drunkenness; and on board of the John Adams, a half dozen temperate individuals probably could not have been selected from the entire crew, if officers and apprentice-boys were excluded. The latter composed about one-fifth of the whole number.

An applicant for the naval service is required to be strictly examined by the attending surgeon, before signing the shipping articles at the rendezvous. The presumption is, that none of unsound health are detailed for a ship. This, however, does not always hold good, as in consequence of there being no medical director, or surgeon-general of the navy, the instructions issued to the surgeon of a rendezvous have not hitherto accomplished the object for which they are intended. Indeed it may be said, that the responsibility of admitting or rejecting a sailor is left to the surgeon's unguided judgment, and personal feelings. The rules by which each one is governed may be widely different; and hence the greatest latitude of opinion and practice necessarily prevails.

The John Adams was commissioned at New York, December 5th, 1837, and placed under the command of Thomas W. Wyman, Esq. A few days subsequently she sailed for Norfolk, and was there detained until the following May, awaiting the preparation of her consort, the frigate Columbia. The exposure of our crew to the inclemencies of an American winter, without fire or artificial heat of any kind, afforded a pretty fair test of their stamina. In the spring about twenty who had not come up to the required standard of hardihood were exchanged at the receiv-

ing vessel for an equal number apparently more robust. I will not venture to assert, how much the sufferings of the remainder prepared them to experience additional harm from future liabilities.

During the period of our delay at Norfolk we lost two by death. The one, an apprentice boy affected with catarrh, was suddenly carried off by congestion of the brain; a form of disease then endemic in the neighborhood and frequently fatal. The other was an officer's servant, on whom the small-pox appeared a day or two after leaving his friends in New York. The malady was communicated to some others who recovered. Those of the crew, not bearing unerring characters of vaccination about their persons, were subjected to the operation at the time, and the contagion did not again obtain a foothold amongst us, although we visited some ports at which it raged most virulently, and where the flag-ship suffered to a considerable degree.

The average number on the sick-report while in the waters of the United States was twelve.

May 6th, 1838, Sailed from Hampton Roads.

May 26th, Arrived in Funchal, Maderia.

The salubrity of Maderia is universally known and acknowledged, the pleasantness and equability of its climate having long recommended it to the valetudinarian. It is unnecessary to add my testimony to the mass already on record by dwelling at length on its peculiar advantages, as the writings of Sir James Clarke, and others, have already familiarized them to the professional reader.

The average number on the sick-report whilst in Maderia was ten.

June 3d, Sailed from Maderia.

July 11th, Arrived in Rio de Janeiro.

The City of Rio Janeiro is in latitude 23° south; longitude 43° west. Its peculiar position, among lofty mountains, screens it from most winds, excepting those blowing into the mouth of the harbor. The air is consequently excessively hot and sultry during a greater part of the year. The effect of its high temperature is manifested in the cachectic appearance of its population,

and their obnoxiousness to diseases consequent upon a relaxed fibre. It is estimated that one-half of the residents of Rio are afflicted with some variety of hernia. The magnitude which oscheocele sometimes attains almost exceeds credibility. It is currently reported of one individual, long since deceased, that the scrotum had descended so low from the weight of the contained parts, as to oblige him from necessity for convenience, to wheel it in a hand-barrow in advance of him. However this may be, the most casual observer cannot fail to remark the number of enlarged scrotums among the laboring classes, whose dress serves to display the affection. Some of these may result from dropsical effusions, which are likewise very common. Agreeably to my observations, during the year (1834-5) when I was attached to the squadron on the coast of Brazil, the most frequent termination of all diseases of any standing was in hydrothorax. This was especially the case with those of depraved habits and impaired constitutions. Among children effusions on the brain are exceedingly common; so much so as to give the peculiar conformation of the skull observed in hydrocephalic patients, very generally, to those born in Rio. It is very evident in the young emperor, Don Pedro. It would be interesting to determine the influence it exerts, if any, upon the faculties of the mind.

Writers upon the medical topography of Rio enumerate fevers and dysenteries as rife disorders. This does not certainly apply to the shipping. Indeed, it has been rare on board of vessels, in which I have served, to find acute diseases of any kind. Our crews are generally healthy on the Brazil station, when the ordinary care has been taken to procure sound men. Those subject to chronic affections, from previous cruizes in the tropics, are always the first to succumb to the enervating influence of its climate. Cutaneous diseases are exceedingly common among the blacks, especially that most disgusting malady, elephantiasis arabum. The small-pox often prevails to a frightful extent, being introduced by the slavers from the coast of Africa. Indeed, the city is seldom without some sporadic cases.

The average number on the sick-report at Rio was thirteen.

During our stay in Rio a medical survey was held on those in-

dividuals whose health was supposed to incapacitate them from a residence in the East Indies. The experience of the following year satisfied me that all *old men*, whatever might be their apparent strength of constitution, should be included in such a category. In the case of sailors, all beyond fifty may justly be denominated aged; for among a set of men so much exposed, so irregular and so thoughtless under all circumstances, comparatively but few attain senescence. In support of this view, I may adduce the cases of *all* those who had attained or exceeded the age I have specified, and trace their history through the trying climate to which they were sent; although by doing so, I shall somewhat anticipate the regular narrative. These persons were five in number.

1st. John Ball, æt. 53, was condemned by the medical survey in Rio, but for some reason was not sent to the United States. His habits on shore had always been bad; aboard ship when he could not drink spirituous liquors to excess, he usually had tolerable health. On our arrival in Singapore, in February 1839, he took his first and last frolic in the East Indies. Shortly after it, he was seized with a violent cholera-morbus, in a few days settling into a fixed pain over the epigastric and right hypochondriac regions, with great gastric irritability. After fourteen days illness, death supervened during a severe rigor. On examination after death, in addition to various lesions of the stomach, lungs, and heart, the *liver* was found in the following state; "enlarged and indurated in left half; right lobe friable and excavated in the posterior portion, containing at least a half gallon of illaudable pus. This cavity communicated with the cavity of the abdomen under the suspensory ligament, in which matter also existed." This case is interesting, as displaying the extensive progress which a hepatic abscess is capable of making in the short period of a fortnight, under circumstances favorable to its development. There probably existed previous *induration* of the liver, as found in the left lobe; but it is pretty certain, from the symptoms during life, that the formation of the *abscess* commenced but a few days before death. The first complaint of a pain in the side was made eleven days prior to this event.

2d. C. Trusty, æt. 54, a black. When the ship had been in the East Indies six months and others had begun to suffer with dysentery, this man was attacked with paroxysms of hemiplegic epilepsy, affecting the right side. These continued five months, growing severer, with shorter intervals between them, until death terminated his sufferings.

3d. Silas Cooper, æt. 55. This man continued on duty for ten months after doubling the Cape of Good Hope, when he was admitted on the list for debility. For three months he continued gradually to sink, and then died, apparently from the exhausting effect of climate operating on old age.

4th. John Hamilton, æt. 54, went through the East Indies, unscathed by disease; but, on a long passage from China, when scurvy appeared among the invalids, he was attacked more severely than any other, and would have fallen a victim to it but for our timely arrival in port.

5th. John Smith 1st, æt. 53. Though not afflicted with any serious malady, still his case is apposite to our subject. From ordinary exposure he was subject to intermittent fever, the rigors of which were sometimes so severe as to excite apprehensions for the consequences. On one occasion a toe took on that peculiar condition denominated gangrena senilis, and part of it sloughed off. Smith was one of the sufferers from scurvy.

6th. Henry Rossel, æt. 58, early declared himself an invalid, and was sent home in time to escape from the fate which probably awaited him.

But there are other causes of disqualification than old age, which should be equally regarded in the selection of a crew to cruize in the East Indies. All those of infirm health, or who have suffered from organic diseases, ought to be unhesitatingly rejected. It is hazardous also for those who are too young to undertake it, as constitutional predispositions that might be overcome on attaining manhood are more likely to be developed. But a class more objectionable than all others are those who have previously been exposed to that or a similar climate, and especially if they have been the subjects of dysenteric complaints. It is not with the dysentery of the East, as with the yellow fever of the

West Indies, that one is seasoned against it by time; for it is well known, as a modern author, Dr. Jas. Johnson, remarks, that "the intestines become more irritable by every subsequent attack, and even without an attack" in the East, by the functional derangements which annually increase among those exposed to the causes of dysentery. This consideration should operate upon those having the disposition of our naval forces, to cause our cruizes in the east to be as little protractive as possible; for, after all, it is not the unhealthfulness of particular ports, so much as the general delay on the station, which makes the mortality on board of our public vessels so great.

It is at least curious, it may be a coincidence, that with us, the blacks who amounted to about one in twelve, did not suffer to any extent from the peculiar diseases of the East Indies. The same remark applies to those of Asiatic extraction. Among those of European descent, about one-fourth were subjects of dysenteric attacks. But to resume our narrative.

July 26th, Sailed from Rio Janeiro.

September 11th, Arrived in Zanzibar.

Zanzibar, the first port visited east of the Cape of Good Hope, is situated on the island of the same name in south latitude 6° , and east longitude 39° . The island is of coralline formation and but slightly elevated above the level of the sea. The soil is productive, yielding luxuriantly rice, sugar cane, spice and various palm trees. The town is constructed in the true style of Arab filth and misery. It contains a population of nearly 50,000, including Arabs and natives of the island and Africa.

We arrived at this place near the close of the south-west, or fair monsoon, which is esteemed the healthiest. At this time a steady southerly wind blows in the direction which the land trends. Zanzibar has the character of unhealthfulness, but our crew escaped with a few cases of fever and diarrhœa, attributable to a change from salt provisions to a fruit and vegetable diet, and their unavoidable exposure to the sun. All practicable precautions were enforced by Capt. Wyman to avoid the causes of disease. As these were identically the same at other ports it may not be impertinent to record them here in detail. No

unripe fruit or vegetables were allowed to be purchased by the crew, and only such of the ripe as were approved of by the surgeon. The ship was watered, and other duties subjecting the crew to exposure were performed by the natives of the country. Attention was paid to thorough ventilation, by the use of wind-sails of a large and improved construction, and by cutting additional hatches in the spar-deck. In the evening the awnings were housed, and most of the crew slept on deck. The bedding was weekly well aired. Water was frequently admitted into the ship, and bilge-water in this way kept from collecting. The other prophylactic precautions which were used, are common to all well regulated American men-of-war, such as cleanliness, preventing the smuggling of liquor from on shore, promoting cheerfulness and contentment, &c.

The intoxicating beverage made in Zanzibar is a toddy extracted from the cocoa-nut tree. The mode of obtaining it practised by the natives is to lop off the upper branches, and catch the fluid which oozes out in a cocoa-nut shell. This is quite palatable, when in a state of fermentation, but it invariably induces diarrhœa in those partaking of it at all freely.

None of the officers or men slept on shore during our stay in Zanzibar. This is the principal source of danger on the west coast of Africa; where but few who do so escape a highly dangerous fever. If we may judge from the experience of H. B. M. ship *Andromache*, the climate of Zanzibar is equally hazardous to Europeans under similar circumstances. Under the command of Commodore Morise she visited the island in 1824, when a party of the officers, the Commodore himself being among the number, slept for one night at the house of the Governor, situated a short distance in the interior. Shortly afterwards, the greater number of them, including the Commodore, were seized with the African fever, and all so affected died. Capt. Owen, the celebrated English hydrographer, relates that one of his boat's crew, five in number, were unavoidably detained on shore for one night. Four out of the five, instead of sleeping in their boat, landed and lay beside a large fire which they kindled in the jungle. For nearly a fortnight no effects were visible, but at the end of that

time they fell ill and died; while the fourth was obliged to be sent home with an emaciated body and worn out constitution. Notwithstanding this testimony, I am disposed to believe Zanzibar is more healthful than some other parts of Africa. The appearance of both the native and European population indicates a soil and climate infinitely more propitious to the normal existence of animated nature in all its varieties, than can be found on the Grain-Coast, the seat of our Colonization Society, which I visited in the autumn of 1836. There man exhibits, as Dr. James Johnson correctly remarks, the lowest varieties of formation.

The few American and English residents in Zanzibar display a far more rubicund visage than we ordinarily found in British India; and it is worthy of remark that they entirely eschew the practice of the latter in applying "hot and tempestuous liquors to the blood." As water there is not so good as might be desired, it is almost entirely superceded by the use of the bland and delicious juice of the young cocoa-nut. The water, as we found it every where else along the Indian Ocean and China Sea, after remaining on board ship a few days, became filled with animalcula, which sometimes acquire rather an alarming size. It required at first a little resolution to swallow them, but I am not aware of any prejudicial effects ensuing. Some attribute to these little animals almost all the calamities "that flesh is heir to" in these parts; a prejudice I myself may have entertained at first to a slight extent, but I soon disbanded it *in toto*.

Cassada and rice, with a few fish, are the principal articles of native diet. Besides these we find in great abundance in the animal kingdom, bullocks of the humped species (*bos indicus*), goats, and dunghill fowls; and among fruits and vegetables, the sweet-potato, beans, melons, cocoa-nuts, plantains, &c.

The average number of the sick-report at Zanzibar was eighteen. September 18th sailed from Zanzibar. October 5th arrived in Muscat.

Muscat, the capital of the classical province Oman, is on the Persian Gulf, in Arabia Felix, north latitude $23\frac{1}{2}^{\circ}$, east longitude $58\frac{1}{2}^{\circ}$. The harbor is situated at the base of a lofty rock of mica-schist, which completely encircles it, except at one gap. This

rock excludes the air, or rather checks its current, and, at the same time, reflects the sun's rays with such intensity as to render the city at most times extremely uncomfortable from its high temperature. As its almost insufferable heat is its distinguishing characteristic, I shall present without apology the following thermometrical table, copied from a work written by an Italian physician named Vincenzo, who for many years was in the Imam's service and resided in Muscat. In corroboration of its accuracy, I am enabled to state, that I have seen the mercury in Fahrenheit's scale at 96° about midnight, and at no period of the day or night was it common to see it below 90° the average range for the ten days of our stay in October, being ninety-three.

MONTHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
TEMPERATURE. } RAIN.	80° to 84° never	85° to 88° never	87° to 89° *	90° to 92° never	93° to 96° never	96° to 99° †	96° to 99° never	94° to 98° never	92° to 95° ‡	91° to 94° never	90° to 93° never	85° to 88° never

The town is excessively filthy and ill ventilated, being surrounded by a wall, and the most of it forming a bazaar which is covered with palm-leaf mats to exclude the sun, and answering the purpose of excluding the fresh air almost as effectually. Its houses are in the true Arabic style, that is to say, crowded together as closely as possible, with only sufficient space for a narrow alley which is always dirty, and redolent with the most noxious perfumes, derived from animal excrement and decayed vegetable matter.

Muscat contains about twenty-five thousand inhabitants, principally Arabs, Hindoos, and African slaves. Their principal diet consists of dates and fish, both of which are abundant and cheap. Shipping has supplied them with bullocks, sheep, and poultry on moderate terms, in addition to a variety of vegetables and fruits. Among the latter, I may mention dates, grapes,

* Sometimes two or three days in March, but not annually.

† Sometimes with lightning, but without a thunderbolt ever following.

‡ There are some years in which it rains two or three days in September.

pomegranates and figs. These are all brought from a distance, as in the immediate neighborhood the soil is rocky and barren, without a verdant spot to relieve the prospect, except in the immediate vicinity of the wells, where a species of lucern is cultivated by artificial irrigations. About these oases are little villages, consisting of the miserable huts of the poorer classes who are forbidden to construct commodious dwellings without the walls, lest they be turned against the city in the event of a siege. They consequently consist of mere thatched sheds, that may be fired at a moment's warning.

It would be unreasonable to expect in the inhabitants of such a place as Muscat, vigorous health. We accordingly find among them a universal leucophlegmatic aspect, indicative of their feeble stamina; together with more marked manifestations of disease, as leprous affections, ophthalmiæ, visceral obstructions, and dropsical effusions. Much evil may be attributed to the baneful effects of their social and religious customs, which authorize a plurality of wives, the intermarriage of near connections, early sexual intercourse, and the seclusion of females. But there are partial offsets to these, in the universal prevalence of temperance, both in eating and drinking, their frequent ablutions, their loose and flowing dresses, and in that serenity of mind which never deserts the Arab. It is among those pitiable wretches, who drag out a miserable existence in the outskirts of the city, that the chronic maladies, I have referred to, mostly abound.

The medical profession is in the hands of three or four ignorant natives of Persia, who do not trust themselves beyond a few ordinary plants, such as senna and rhubarb. As these worthies do not enjoy the full confidence of the Muscatians, the arrival of a western physician is always hailed as a god-send, and he is forthwith beset by hosts of invalids and sick.

During the summer months, fevers and dysenteries prevail, especially affecting those not acclimated, for whom scarcely any immunity is said to exist; it being reckoned almost necessarily fatal for a European to reside in Muscat, during the hot season. Three agents of the English East India Company successively fell victims within a short period of each other. No Euro-

pean has resided there latterly. The crew of the John Adams experienced no ill effects of climate, during the week of our stay, beyond a few ordinary cases of fever and cholera-morbus. A slight exposure to the sun's rays was apt to induce cephalalgia, from a partial *coup de soleil*. A case of this kind on board of our consort proved fatal.

The average number on the sick-report at Muscat was sixteen.

Review.

A Treatise on Diseases of the Heart and Great Vessels, &c. By J. HOPE, M.D., F.R.S. with Notes by C. W. PENNOCK, M.D. first American from the third London edition, Philadelphia, Haswell & Johnson, 1842.

IN the memoir of Dr. Hope, prepared by Mrs. Hope, we see exhibited an active and enthusiastic mind developing itself by unwearied industry and cautious observation. The work before us is one of the valuable products of such a mental combination, and deservedly ranks among the most valuable contributions to medical literature. The American edition contains much valuable matter, added by the editor, Dr. Pennock. The work is divided into six parts, treating of the Anatomy and Physiology, Inflammatory affections, Organic affections, Nervous affections, Miscellaneous affections, and Cases. In his introduction, after paying a deferential tribute to his predecessors, Dr. Hope assigns his reasons for the present undertaking; which were, the errors of Laennec in regard to the action of the heart, leading to corresponding errors of auscultation, and his ignorance of the murmurs of regurgitation; the inaccuracy of preceding writers in regarding the symptoms of a retarded circulation as, always, the result of a mechanical obstacle; and the error of attributing to muscular contraction those murmurs which exist in anæmic and nervous palpitation, independent of valvular disease. Dr. Hope ascribes them to a modified motion of the fluid producing its effects in accordance with the laws of hydraulics and acoustics.

Dr. Hope thinks the investigations of Laennec on aneurism of the aorta limited and inconclusive, and that its diagnosis may be more definite. Regarding the treatment of diseases of the heart as being very defective and much neglected, Dr. Hope has direct-

ed much attention to the subject, and comes to the following very gratifying conclusion.

"We may, accordingly, predict that the term "disease of the heart," which at present sounds like a death knell when uttered by the physician, will hereafter become by familiarity not more alarming than the term *asthma*, under which it is frequently disguised."

The importance of a correct knowledge of disease of the heart is not confined to this organ alone, as "there is scarcely an affection with which disease of the heart may not be interwoven."

The accuracy and value of his cases may be estimated from his having first written his opinions and diagnoses, and then publicly tested them by post mortem examinations.

In his remarks upon the anatomy and physiology of the heart, without discussing the point, as to whether the diastole like the systole is an active muscular effort, Dr. Hope agrees to designate it, *elasticity*.

The remarks upon the situation of the heart are so useful that we give them in full.

"As the apex and body of the heart are free, while the base, secured by the great vessels, is comparatively, though not absolutely, fixed, the organ turns in a slight degree upon its base with each alternate movement of the diaphragm, the descent of the muscle causing its longitudinal axis to assume a more vertical position, and the ascent throwing it transversely to the left. It is necessary, therefore, that the auscultator fix upon some given point at the base, which may serve as a mark and guide for his exploration of the situation of the organ. The point which to myself has appeared the most certain, is the pulmonary artery. This vessel, near the place where it divaricates into the two trunks distributed to the lungs, bulges, while the subject is horizontal, at the interspace between the second and third left ribs close to the sternum. At the spot alluded to, namely, between the second and third left ribs, close to the sternum, the second sound of the heart is louder even than opposite to the pulmonic valves themselves. This is simply because the sternum is not interposed; for the sound attains its maximum of intensity when the subject lies inclined to his left side, by which the pulmonary artery is forced as far as possible beyond the outline of the sternum; and, on the contrary, when he lies inclined towards his right side, by which the vessel is drawn under the sternum, the sound is no longer peculiarly audible between the second and third ribs. When the patient is in the erect position, the gravitation of the heart straightens and pulls down the pulmonary artery, so that the sound is less audible in the second costal interspace.

"A line drawn from the inferior margins of the third ribs across the sternum, passes over the pulmonic valves a little to the left of the mesial line, and those of the aorta are behind them, but about half an inch lower down. From this point

the aorta and pulmonary artery ascend; the former inclining slightly to the right, coming in contact with the sternum when it emerges from beneath the pulmonary artery, and following, or perhaps rather exceeding, the mesial line, till it forms its arch; the pulmonary artery, which is, from the first, in contact with the sternum, inclining more considerably to the left, until it arrives at the interspace between the second and third ribs above described. A vertical line, coinciding with the left margin of the sternum, has about one-third of the heart, consisting of the upper portion of the right ventricle, on its right; and two-thirds, composed of the lower portion of the right ventricle and the whole of the left, on its left. The apex beats between the cartilages of the fifth and sixth left ribs, at a point about two inches below the nipple, and one inch on its sternal side.

“The lungs descend along the margins of the sternum about two inches apart, and overlap the base of the heart, slightly on the right side, and more extensively on the left: then, receding from each other, they leave a considerable portion of the right ventricle, and a less extent of the lower part of the left, in immediate contact with the thoracic walls.

The right auricle is in front of the heart, at its right side and upper part. One portion of it is overlapped by the right lung, and another, principally the appendix, is in contact with the sternum. The left auricle is situated deeply behind and to the left of the heart at its upper part, opposite to the interval between the cartilages of the third and fourth ribs. The extremity of the appendix is visible in front, but, when the volume of the heart is natural, it is not in contact with the sternum, being considerably overlapped by the left lung. The auricular orifices are situated opposite to the interspace between the third and fourth ribs, and the right is rather lower down than the left. As, however, the orifices are overlapped by the lungs, the sound of their valves is much less audible immediately over them than near the apex of the heart, to which part the sound is conducted by the chordæ tendinæ and columnæ carneæ. The pericardium ascends on the great vessels as high as the commencement of the arch of the aorta, and opposite to the second ribs.

“When the heart is enlarged, its longitudinal axis becomes placed more transversely, and its lateral diameter is increased. Hence, the right ventricle projects more considerably to the right, sometimes under the whole breadth of the sternum; and the left extends far beyond its usual limits to the left, sometimes elevating by compression that portion of the lung which overlaps it, so as to bring nearly its whole surface, and the tip of the auricular appendix, into contact with the walls of the chest. In addition to being broader and placed more transversely, the organ descends lower than natural—its apex sometimes beating between the sixth and seventh ribs, and its pulsation extending to the epigastrium.

“When the right auricle is dilated or gorged, it extends upwards and to the right, and comes more extensively in contact with the sternum.

“When the pericardium is distended to the utmost with fluid, it forms a pear-shaped bag, the top or narrow extremity of which, when the patient is horizontal, sometimes mounts even above the second rib: its sides are nearly in contact with the sides of the heart, while its front is separated from the anterior surface of the heart, in the dead subject horizontally placed, by two or three inches of interposed fluid.”

In a note Dr. Pennock gives a minute account of the various positions of the heart.

Dr. Hope thinks that percussion on the back of one or two fingers is sufficiently delicate, but accords greater nicety to the plesimeter of Mr. Piorri, when lined with wash leather or cloth. He gives the following directions for ascertaining the dimensions of the heart.

“The mode of manipulation which I employ, is to place one finger over the decidedly dead part, and another over the slightly resonant edge of the lung, when, by striking the two fingers alternately, the arched line along which the organ lies in contact with the walls, may be traced with surprising accuracy, unless the subject be remarkable for obesity, which obscures the resonance. In females, the mamma may be pushed upwards, which generally leaves the dull portion sufficiently accessible.

“The extent of the dull portion in an average-sized adult with a well-proportioned heart, is represented by a circle of one and a half to two inches in diameter, supposing the individual to stand or lie without protruding the chest, and in a middling state of inspiration.

“When the heart is enlarged, as by hypertrophy, dilatation, fat, or even temporarily by congestion, the descent of the lungs being impeded, the dull portion increases and may attain the diameter of three, four, or, in extreme enlargement, even five inches. The centre of the dulness generally lies between the cartilages of the 5th and 6th ribs, but in great enlargement it lies lower, as between the 6th and 7th ribs, because the organ is depressed by its own gravitation, except when held up by adhesion of the pericardium. In copious hydropericardium, I have known the dulness ascend under the sternum, in the conical form of the sac, as high as the level of the second rib; and I have repeatedly traced the gradual descent of the dulness in proportion as the fluid was absorbed.

“The causes which may prevent the development of dulness on percussion are, 1. emphysema of the lungs, occasioning their protrusion in front of the heart; 2. the chicken-breasted conformation of the chest, especially when connected with spinal gibbosity. Of the latter cause, though not mentioned by authors, I have noticed many instances.”

We next come to the important consideration of the action and sounds of the heart. The erroneous view taken by Laennec of the heart's action and which was received for many years, until partially exposed by Mr. Turner, was fully corrected by a series of most cautious experiments performed by Dr. Hope in the summers of 1830 and 1831, in the presence of many distinguished professional men. He gives a minute history of these experiments so that any one so disposed can repeat them. The questions to be solved were drawn out, and proposed to his coadjutors.

The experiments lead to the following conclusions.

Of the Motions of the Heart.

1. The auricles contract so immediately before the ventricles, that the one motion is propagated into the other, almost as if by continuity of action; yet the motion is not so quick that it cannot readily be traced with the eye.

2. The extent of the auricular contraction is very inconsiderable, probably not amounting to one-third of its volume. Hence the quantity of blood expelled by it into the ventricle, is much less than its capacity would indicate.

3. The ventricular contraction is the cause of the impulse against the side; first, because the auricular contraction is too inconsiderable to be capable of producing it; second, because the impulse occurs after the auricular contraction, and simultaneously with the ventricular, as ascertained by the sight and touch; third, because the impulse coincides so accurately with the pulse in arteries near the heart, as not to admit of being ascribed to any but the same cause.

4. It is the apex of the heart which strikes the ribs.

5. The ventricular contraction commences suddenly, but it is prolonged until an instant before the second sound.

6. The ventricles do not appear ever to empty themselves completely.

7. The systole is followed by a diastole, which is an instantaneous motion, accompanied with an influx of blood from the auricles, by which the ventricles re-expand, but the apex collapses and retires from the side.

8. After the diastole, the ventricles remain quiescent, and in a state of apparently natural fulness without distention, until again stimulated by the succeeding auricular contraction.

Of the Sounds.

9. The *first sound* is caused by the systole of the ventricles.

10. The *second sound* is occasioned by the diastole of the ventricles.

Of the Rhythm.

Order of succession—

1. The auricular systole.

2. The ventricular systole, the impulse, and the pulse.

3. The ventricular diastole.

4. The interval of ventricular repose, towards the termination of which the auricular systole takes place.

Duration.

This is much the same as indicated by Laennec, viz:

The ventricular systole occupies half the time, or thereabout, of a whole beat.

The ventricular diastole occupies one-fourth, or at most one-third.

The interval of repose occupies one-fourth, or rather less.

The auricular systole occupies the latter part of the interval of repose.

Having thus cautiously and carefully established the physiological and mechanical functions of the heart, Dr. Hope next proceeds to an examination of their modifications by disease.

In *hypertrophy*, the impulse is by a gradual heaving or progression, followed by a sudden sinking back, with a jog or shock,

called by Dr. Hope the Diastolic impulse. This progressive heaving rendering the closure of the auricular valves sluggish, causes the first sound, that of the ventricular systole, to be dull and more prolonged than natural, in proportion to the degree of hypertrophy; and the second sound is also diminished, because the ventricular diastole, no less than the systole, being performed more sluggishly, the recoil of the blood on the sigmoid valves is less smart; and this smartness is still farther diminished, in hypertrophy with contraction, because the quantity of blood expelled by the ventricles, is insufficient, adequately, to distend the arteries. Dr. Pennock remarks, that in simple hypertrophy uncomplicated by disease, and free from valvular lesion, the second sound remains undiminished.

“By *Simple Dilatation*, and *Dilatation with Attenuation*, the impulse is diminished, often to the extent of being imperceptible. When perceptible, it is a sudden brief blow, which communicates a shock or vibration to the thoracic walls, but has not power or duration to elevate them.

“The first sound in dilatation, becomes loud, brief, and clear, like the second.—This arises from the muscle, in consequence of its thinness, contracting with increased facility and velocity,—whence the extension of the auricular valves with their chordæ tendineæ, and of the muscular walls themselves, is more sudden and smart. The sound is not prolonged by *bruit musculaire*, apparently in consequence of the feebleness of the contraction. In dilatation with attenuation, the first sound is so brief and often feeble a click, that I believe it to be produced by valvular extension alone.

“The second sound is more or less increased, because the thin ventricle, from having greater facility of movement, performs its diastole, as well as its systole, with greater velocity; whence the recoil of the sigmoid valves is more sudden.”

Hypertrophy with dilatation.—The impulse partakes of the power of hypertrophy and the smartness of dilatation. The first sound is increased, so as sometimes to be louder than in any other disease of the heart, and is prolonged by *bruit musculaire*. The second sound is increased to its maximum.—A soft and slight bellows murmur occasionally accompanies this morbid condition.

Valvular Murmurs.—To the valvular murmurs of Laennec (the bellows murmur arising from affections of the mitral and sigmoid valves,) Dr. Hope adds another and extensive class of murmurs, those from regurgitation; thus assigning double murmurs to each valve; “one from the blood flowing in the natural direction, the

other from its flowing retrograde when the valve is permanently patescent. Dr. H. rejects the murmurs from spasm of Laennec, and thinks that he has rendered the diagnosis of valvular disease, not only the most certain connected with the whole subject, but so simple and easy as to be readily attained by the meanest capacities. The following are the circumstances to which he attributes valvular murmurs.

Aortic Valves.—A murmur attends the ventricular systole in every degree of disease of the aortic valves sufficient to contract the aperture,—asperity of the valves without contraction,—dilatation of the aorta above the valves; and he further adds,

“I have found a very loud bellows-murmur produced by an opening, admitting the index finger, from the right ventricle into the mouth of the left ventricle and the aorta (case of Collins); and I have noticed the same murmur in four other cases of malformation with Cyanosis, in which I had not the opportunity of post mortem inspection.”

Dr. Pennock assigns a cartilaginous or ossific ridge on the internal circumference of the aorta as the cause of a very rough bellows-murmur, a whizzing or rasping sound, over and above the aortic orifice. A murmur is produced by constriction of the arterial orifices consequent upon inflammation of the lining membrane, and by concretions of blood in the heart. Dr. Pennock calls attention to the influence which the state of the circulation has in developing and changing the murmurs.

Diastolic Murmurs or those from regurgitation, of the same valves, arise from any cause which prevents their complete occlusion. Dr. Hope gives the following characteristics of aortic regurgitation:

“1. The murmur is soft like bellows-murmur, or still more like gently sucking in air through the lips only moderately closed, as in pronouncing the word *awe*; and it is weak, as compared with the much greater intensity which systolic murmurs may attain in the same situation.

“2. The murmur is generally very prolonged—a long sigh, tailing, as it were, the second sound and often extending completely to the next ventricular systolic sound.

“3. The murmur is more audible than a systolic murmur is *below* the sigmoid valves and down the ventricle, though, notwithstanding, it decreases as it descends. This obviously proceeds from the current setting into, and exciting sonorous vibrations within, the cavity of the ventricle. The circumstance is of importance in a diagnostic point of view; for it might create the erroneous belief that the murmur

was seated in the mitral, instead of the aortic valves (as both occur during the diastole), unless the auscultator were careful to ascertain that it was loudest at, or above the aortic valves, where a mitral diastolic murmur, always feeble, would be wholly inaudible."

Dr. Hope has never met with either systolic or diastolic murmurs of the pulmonic valves caused by disease of those valves, and believes that such murmurs are to be attributed to other causes than valvular lesion. The systolic murmur of the mitral valve, Dr. Hope's experience teaches him to be the most frequent of all the murmurs; it arises from any causes capable of holding the valve permanently open. Unless diminished by softening, or by dilatation with attenuation, the murmur is loud. The following remark of Dr. Pennock in connection with this murmur is important.

"Regurgitation through the mitral valve during the systole of the heart, often takes place without any striking organic lesion in persons of irritable temperament upon the occurrence of any mental agitation or upon any sudden exertion. Under such circumstances, the systole of the heart is accompanied by a slight blowing sound, heard near the apex, not perceptible over the aorta, and ceasing when the disturbing cause has passed by. It is probably produced by a slight irregularity in the contractile power of the columnæ carneæ, in consequence of which, all parts of the mitral valve are not simultaneously rendered tense."

Any lesion of the mitral valve capable of contracting its aperture, gives rise to the diastolic murmur, unless the force of the current of blood is very much diminished. This was one of the two murmurs discovered by Laennec, and was supposed to be of frequent occurrence, but Dr. Hope thinks, that this is a mistake arising from this murmur being confounded with that from aortic regurgitation. Systolic murmur of the tricuspid valve is rare, because valvular disease does not occur on the right side of the heart oftener than once to sixteen times on the left, and when it does occur, it is seldom of sufficient extent to disable the valves. Dr. Pennock tells us it should be sought for, over the right ventricle near the junction of the cartilage of the fifth rib with the left side of the sternum.

Dr. Hope has never met with an instance of diastolic murmur of the tricuspid valve.

Mechanism and varieties of Valvular Murmurs.—Dr. Hope gives the following definition of these murmurs :

"Valvular murmurs are occasioned by collision of the particles of the blood against each other, and against the containing solids, when this fluid is, by any cause, thrown into preternatural commotion during its passage through the orifice of a cavity. This commotion produces sonorous vibrations in both the fluids and the solids."

He does not think with Laennec, Bertin and Bouillaud, that the character of the murmurs, with respect to roughness or smoothness, indicates the nature of the morbid affection, the rough sound indicating ossification, and the smooth, fibrous or cartilaginous disease; nor does he agree with Elliotson that the roughness is in proportion to the degree of contraction.

"But that it depends upon such an accidental *configuration* of the contracted orifice as is best calculated to break the stream of the blood, and throw it and the contiguous solids into large vibrations—a configuration with which I have generally found a considerable though not necessarily a high degree of contraction to coincide.

"To sum up, then, the presumptions afforded by a rough or rasping murmur would be 1, that the cause is organic, for inorganic murmurs, as will hereafter be shown, are never rough; 2, that the contraction of the orifice is not inconsiderable; 3, that if the murmur occur after the age of 60, the disease is probably osseous."

He does not agree with Laennec and Bouillaud that continuous murmur is arterial, but thinks that it is generally seated in the veins. He has twice heard it in the heart, in one case it depended upon a moderate quantity of fluid churned in the pericardium, rough with lymph, and in another was occasioned by regurgitation out of an aortic aneurism into the right ventricle.—Dr. Hope gives his conclusions upon valvular murmurs in the following rules:

"1. The ventricular *systolic* currents through contracted orifices, from being stronger than the *diastolic*, produce louder murmurs.

"Considerable contractions, of a rough, salient configuration, whether osseous or not, produce the rough murmurs of sawing, filing, or rasping, provided the current be that of the ventricular systole, its diastolic currents being too feeble.

"3. The pitch or key of murmurs is higher in proportion as they are generated nearer the surface, and the currents producing them are stronger; and *vice versa*. Also, the key is lowered by distance, independent of depth, from reverberation through the chest.

"4. Musical murmurs indicate nothing more than ordinary murmurs.

"5. Rough murmurs, and even loud and *permanent* bellows-murmurs, indicate organic disease.

"6. Permanent murmurs from regurgitation necessarily indicate organic lesions.

"7. Continuous murmurs in the heart will probably be found to indicate, sometimes organic disease attended with regurgitation out of the aorta into the right ventricle or pulmonary artery; sometimes churning of a little serum between layers of rough lymph on the pericardium; and sometimes, probably, dilatation of the pulmonary artery and compression of the vena innominata."

Situation in which Murmurs are most audible.—Dr. Hope thinks he has done away with the inaccuracy and obscurity attending this point; and is able to give a few simple rules capable of being acquired in a few minutes,

"Murmurs seated in the semilunar valves are best heard immediately over those valves, (that is, on the sternum, opposite to the inferior margin of the third ribs when the patient is horizontal, and a *little* lower when he is erect,) and thence for about two inches upwards, along the diverging courses of the aorta and pulmonary artery respectively. A distinct murmur high up the aorta proceeds from the aortic valves, as a pulmonic murmur is only feebly and indistinctly transmitted in that direction. It may be known that the murmur proceeds from the aortic valves rather than from the diseased ascending aorta itself, by its key not being higher than a whispered *r*, whereas a murmur from the aorta itself is commonly a tone or two higher, approaching towards an *s* and also seems much *nearer* and more superficial.

"A distinct murmur high up the pulmonary artery proceeds from the pulmonic valves, as an aortic murmur is only feebly and indistinctly transmitted in that direction. The pulmonic murmur, whether seated in the valves or in the pulmonary artery itself, (as when dilated,) always sounds near and superficial, provided the current be sufficiently strong; because the valves and artery are close to the surface, the valves being not only in front of the aortic valves, but half an inch higher up. A murmur in the pulmonic orifice is more audible down the tract of the right ventricle than of the left—which is a corroborative circumstance.

"Thus, by listening *high up* the aorta and pulmonary artery, it is easily ascertained in which vessel the murmur is seated. This rule will even apply to semilunar regurgitations, notwithstanding that their murmurs are weaker and not so well transmitted *up* the vessels in consequence of the current setting *out* of them into the ventricles. Further rules for distinguishing these regurgitations have been offered at p. 99. There is a further and most important advantage in exploring murmurs of the semilunar valves high up the vessels: namely, that in these situations murmurs of the auricular valves are, from their remoteness, either wholly inaudible or very obscure: although, therefore, an auricular murmur should co-exist, it would not prevent the auscultator from deciding that a loud and near sounding murmur, heard high up the vessels, was generated in or above the arterial orifices.

"Murmurs seated in the auricular valves are best heard at that part of the præcordial region where, from the heart being in contact with the walls of the chest, there is dulness on percussion—in short, about the apex; for the murmur is best conducted [by the columnæ corneæ] to the surface through a solid medium. The upper and *left* side of the dull portion, being nearest to the mitral valve, is the best point for exploring its murmurs; and this point will generally be found situated

about the fifth rib or subjacent intercostal space, and a little to the right of the nipple: in females, it is under the mamma when pretty well raised, and a little to the right of its centre. If the impulse of the heart be perceptible, there is no better guide than this to the situation in question. The auscultator has only to place his stethoscope about an inch above the spot where the apex impinges.

“The upper and *right* side of the dull portion, being nearest to the tricuspid valve, is the best point for exploring the murmurs of this valve; and the point will generally be found on or near the sternum, at the same level as on the opposite side. If, in making these explorations of either valve, the stethoscope be placed half over the dull portion and half over the thin resonant edge of the lung, the object will be sufficiently answered.

“There is a further, and most important advantage in exploring murmurs of the auricular orifices in these low situations: namely, that the murmurs sound so *near* and distinct as to preclude the idea of their being generated in the arterial orifices, the murmurs of which always sound *remote* and obscure when explored near the apex of the heart. The only source of fallacy is in the case of regurgitation through the semilunar valves on either side of the heart; for, here, the murmur descends down the ventricle with the reflux stream. Yet it is obviated with the utmost ease by attention to the fact that the regurgitant murmur increases progressively on ascending from near the apex to the semilunar valves, and that it is audible above them; whereas, the auricular diastolic murmur decreases in the same progression and is totally inaudible above them.

“When both the semilunar and the auricular valves are diseased, it is perfectly easy to ascertain this by observing, according to the above rules together with those for the pitch of murmurs, that there are two distinct sources of murmur.

“When two murmurs are seated in the same orifice, this is readily ascertained by tracing them up to the single source, and noticing that one attends the first, and the other the second sound.

“In making a valvular diagnosis, it is necessary to keep the finger constantly on the pulse, in order to distinguish the first and second sounds, with their murmurs, from each other. If the radial pulse be much later than the first sound, the carotid should be felt, as its synchronism is more perfect. It is necessary to reiterate these obvious rules, because, from inadvertence, they are habitually neglected by novices.

He concludes these rules with directions for the most favorable and delicate auscultation, and disapproves of substituting the naked ear for the stethoscope.

Murmur from Hypertrophy with dilatation and its mechanism. This is restricted almost exclusively to those cases in which there is anæmia. The changed form of the ventricle co-operates in producing it, by the direction it gives to the currents of blood.

Murmurs in the heart and arteries independent of organic disease.—Dr. Hope differs, with much deference, from the views of Laennec, that these murmurs arise from spasmodic contraction,

and during the diastole, and from mechanical and physiological principles, as well as from observation, he comes to the following results:

“The physical circumstances usually attending inorganic murmurs in the heart and arteries are, 1, attenuation of the blood: 2, unfilled arteries permitting unusual vibration of their walls and a rippling current: 3, a certain velocity of the current occasioned by abrupt contractions of the heart. I do not see why, when the three preceding causes are in action, a fourth (though I have not seen it noticed by authors) is not brought into co-operation: namely, a disturbance of the current at every point where a branch springs from an arterial trunk. This disturbance necessarily and invariably takes place when rigid tubes are the subject of experiment and, though the elastic compression of tensely filled arteries in healthy subjects may, in a great measure, prevent it by limiting the vibratory power both of the arterial walls and the blood, such would not be the case in arteries lax from anæmia. I merely submit this as a suggestion, but would meanwhile remark that the arteries in which inorganic or anæmic murmurs are of most common occurrence, happen to be precisely those from which several large branches arise within a small space: namely, the subclavians, carotids, and abdominal aorta.

Venous or continuous Murmur, Hum and Musical Notes.—The continuous murmur is ascribed by Laennec to spasm of the heart and arteries, and was first by Dr. Ward of Birmingham discovered to depend upon the current of blood in the veins. Dr. Hope confirms and developes Dr. Ward’s discovery, and ascribes all the above-mentioned sounds to the same cause. He thus defines the venous murmur:

“The venous murmur is on a much lower key than the arterial bellows-murmur; for, while the latter is often as high as the note produced by whispering the letter *r* and seldom lower than *au*, the venous murmur is usually as low as *who*.—This sound, indeed, offers the most complete and ready imitation of the phenomenon with which I am acquainted.”

He considers these sounds as characteristic of an anæmic condition, and hence the venous murmur becomes a valuable diagnostic of the anæmic state and of attenuation of the blood, as well as a means of discriminating organic from inorganic murmurs of the valves. In a concluding section of this chapter he gives a synopsis of all the causes of tremor or thrill of the heart and arteries. They arise from the vibrations into which the blood and surrounding solids are thrown by its passage through obstructed orifices, or through imperfectly filled or rough vessels.

Auscultation applied to Pregnancy is the subject of the last

chapter of the first division of the work. In it he proceeds to examine the two signs considered indicative of a living fœtus.—
1. The double sound of the fœtal heart. 2. The utero-placental murmur. He gives the following directions for the detection of the fœtal beat.

“It is useless to attempt an examination in the erect position and through the ordinary dress. The stays should invariably be taken off, as their compression above tightens the walls of the abdomen below. The patient should be in bed, on her back, with the shoulders raised and the knees drawn up and supported; and she should be covered by a chemise only, or a single sheet of a soft quality, as stiff linen creaks under the stethoscope. The abdominal walls are thus completely relaxed, so as to allow the fœtus in utero to be readily felt, the situation of its back tolerably well ascertained, and the stethoscope to be pressed down into solid contact with the uterine tumour. This depression of the instrument should be exercised solely with the head of the auscultator, and not with his hand, as the bruit musculaire of the latter greatly obscures the fœtal sound. The impossibility of exercising similar depression when the ear alone is employed, constitutes the advantage of *mediate*, over *immediate* auscultation in the exploration of the abdomen.—
Profound silence is desirable; the auscultator should hold his breath, and he will find his delicacy of hearing increased by also opening his mouth. He should carefully avoid a stooping position and the slightest bend of the neck, both of which circumstances impair the hearing by causing congestion of the head. These two latter reasons constitute almost as strong objections to short stethoscopes as to the naked ear.

“The abdominal sounds from which, or through which the auscultator has to distinguish the fœtal beat, are, *a.* The sounds of the mother’s heart, sometimes audible on the abdomen, which may easily be discriminated by their synchronism with her pulse and anachronism with the fœtal beats. *b.* Intestinal borborygmus. The listener must wait till it is over. *c.* *Bruit musculaire* of the abdominal parietes. The pressure of the stethoscope scarcely excites it if the parietes be well relaxed by position. *d.* Loud arterial and venous murmurs, to be described under the next head. They occur principally in anæmic subjects. It is sometimes difficult for a novice, on a first trial, to separate, as it were, and identify the fœtal tic-tac amongst so many other sounds: once distinguished, it is so peculiar as never afterwards to be forgotten.”

This sound can be heard at the close of the fourth month; the spot where it is most audible varies with the position of the child, and sometimes requires much change of position and perseverance to discover it. That part of the uterus, to which the back and shoulders of the fœtus are applied, gives the sound most distinctly, and this lies on one side or other, in a line from the umbilicus to the anterior inferior spinous process of the ilium, but occasionally it is more central. Discarding all the con-

clusions of preceding writers, Dr. Hope submits the following propositions in relation to utero-placental murmurs:

“1. That the murmur is arterial when it is a whiff.

“2. That it is venous when continuous without augmentations synchronous with the pulse.

“3. That it is arterial and venous conjoined when it is continuous with augmentations.

“4. That its seat is sometimes in the vessels of the abdominal parietes, as the epigastric, circumflaxed ilii, internal mammary, and their branches and concomitant veins; sometimes in the great arteries and veins within the cavity of the abdomen, as the common and external iliacs, the renal, the three branches of the cœliac, the colica dextra, media, sinistra and ileo-colica, and the portal veins; sometimes, possibly, in the uterine walls, and sometimes, possibly, in the vessels of various tumours.

“5. That the murmur is generally created by pressure, whether that of the uterine or other tumour or of the stethoscope; and that it does not exist independent of pressure except, possibly, in anæmic cases.

“6. That the stretched condition of the arteries, and especially the veins of the abdomen, is favourable to the operation of pressure in producing the murmur.”

He adduces several cases of males, of unimpregnated and of pregnant females to sustain these propositions, and comes to the conclusion that the various sounds constituting utero-placental murmur may exist independently of pregnancy; he then examines the arguments in favor of their being utero-placental, and draws the following practical deductions:

“1. A near-sounding, high-toned continuous or venous murmur with arterial augmentations, heard opposite to the anterior, superior spinous process of the ilium and a little above, does not necessarily indicate pregnancy, because it may exist in connection with other tumours, and also wholly independent of any tumour.—It occurs almost exclusively in the thin-blooded or anæmic with a quick pulse.

“2. An obscure, distant, low-toned murmur, synchronous with the pulse and not continuous, though sometimes rather prolonged, heard on a tumour in the hypogastric region, affords presumptions that the tumour compresses the iliac vessels.

“3. When either or both of the murmurs coincide with other symptoms of pregnancy, they afford presumptions of this state, but do not warrant an affirmation.

In Part Second he considers inflammatory affections of the heart and arteries in four chapters, treating successively of pericarditis—carditis—endo-carditis and arteritis. He is particularly full upon pericarditis, to which are devoted 43 pages. Regarding the anatomical characters of pericarditis as an important key to the symptoms, he treats of them fully, carefully and minutely; they are 1. preternatural redness of the membrane; 2. coagulable lymph

adhering to its surface ; 3. fluid effused within its cavity, and calls the attention of the observer to the fact that endo-carditis generally co-exists with pericarditis. After extensively enumerating the many and various symptoms which attend pericarditis, Dr. Hope remarks. " Now in reality these diversities while they do not render the symptoms less pathognomonic of the disease in general, as will presently be shown, are, according to my observation, invaluable indications in another point of view—they contribute to denote the nature and progress of the anatomical changes of structure, and, in correspondence, the progress and exact state of the malady. For it is a fact of which I feel well assured from long observation, that a difference in the quality and quantity of the effusion imparts a totally different aspect to the symptoms." When the effused fluid is rapidly absorbed, adhesion of the pericardium takes place, the heart maintains its original vigor and regularity, and the pulse exhibits corresponding characters of strength, hardness and regularity. But when there is a copious effusion of unabsorbed fluid the heart is embarrassed and is unable to transmit—perhaps even to receive the blood, flutters, intermits, beats feebly, irregularly, and unequally. From this failure of the circulation through the heart, result its usual symptoms, namely, faintness, dyspnœa, anxiety, coldness, lividity, a sense of suffocation on the slightest deviation from a certain position.

" Should the fluid be copious from the first this series of symptoms will make its appearance equally early ; but, in general, two, three or four days elapse before the accumulation becomes considerable ; in which case the former series—those attended with strong and regular action of the heart, will exist during this period and will then be suddenly replaced by the latter."

Dr. Hope thinks that increased action of the heart, fever and a murmur which did not previously exist, although the least number of signs, are amply sufficient to indicate pericarditis, and he considers dullness, as insisted upon by Bouillaud, an important addition, but not a necessary indication. Dr. Pennock considers this an exceedingly precious sign. To obviate attention being diverted by fictitious inflammation of any other

organ he recommends as a general practice to place the hand on the præcordial region, and on the pulse in every severe inflammatory or febrile affection, and by the anomaly we discover we may be led to investigate successfully pericarditis; by auscultatory attention he thinks there is little difficulty in discriminating pericarditis from other thoracic affections, but, fearing a doubt he recommends a treatment addressed to the heart, and at the same time suited to the complications. Dr. Pennock in a note adds an important diagnostic sign; in pericarditis the dulness would be limited to the shape of the pericardium, and in effusion from pleuritis it would be diffuse.

Physical signs—Percussion.—Dr. Hope says the dulness of the præcordial region mounts higher up the sternum than in mere enlargement of the heart—the impulse is undulatory, not exactly coincident with the first sound, and the “murmurs generate in the auricular valves are more obscure than natural.” Dr. P. adds, that respiration is absent when the præcordial region is elevated, but in cases of mere enlargement this is not observed. Previous to effusion the impulse of the heart is greatly increased. Where there is endo-carditis with aortic regurgitation, there is a remarkable throb of the arteries, perceptible over the whole body, constituting a jerking pulse.

Sounds.—Of these he makes two classes attendant upon pericarditis. Those of the first class are direct signs of pericarditis; for they result from attrition of the opposite surfaces of the pericardium roughened by lymph, and also in some cases from the roughened surfaces agitating or churning a little serum between them. The murmurs are, further, attended with a vibratory tremor generally perceptible to the hand. Of the various sounds he attributes the *rasping*, *grating*, &c. to firm and rugged lymph; the *rustling* and *crackling* to soft wet lymph; the *softer rubbing* to soft dryish lymph; the *creaking* and *croaking* to dry, tough lymph or to granulations; the *continuous rumble* is owing, as already stated, to the churning of a little fluid.

These various “attrition murmurs” run into each other, which is not the case with “valvular murmurs.” Dr. Stokes thinks that attrition murmurs are very limited. Dr. Hope attributes this

to their weakness, or to being generated on the posterior surface of the heart. Dr. Pennock remarks that the attrition sounds attending both the systole and diastole are generally double, and as the motion of the auricles is distinct from that of the ventricles they may be quadruple.

“Adhesion of the pericardium may be inferred from three circumstances; first, cessation of a distinct attrition murmur; second, no increase of dulness on percussion, whence the cessation cannot be attributable to fluid in the pericardium; third, strong jogging, and sometimes double-jogging action of the heart, even though fever has subsided—a phenomena referable to the organ being bound to the spine by the adhesion (See Adhesion of the Pericardium.)

“Resolution may be inferred if an attrition murmur ceases without leaving increased dulness on percussion, or inordinate jogging action, while all the other signs indicate resolution.

“It may be inferred that neither adhesion nor resolution has taken place, if an attrition murmur continue up to the time of death.”

The *second class of murmurs*, called by Dr. Hope *indirect*, as affording presumptive evidence of pericarditis, is valvular, arising from affections of the valves caused by endo-carditis, and their signs are treated of in his account of the *physical sounds of diseases of the valves*. The following are his rules for distinguishing attrition from valvular murmurs:

“1. They are usually of a much rougher quality of sound than the valvular, so that, when the two co-exist, the one may be heard *through* the other.

“2. When a murmur with the second sound is rough, as rasping, creaking, croaking, &c., it is certainly from attrition; as I have never known a valvular murmur with the second sound to be rough, the diastolic currents being too feeble to produce roughness (See p. 107.)

“3. Attrition murmurs are almost always attended with vibratory tremour; whereas valvular murmurs rarely present this phenomenon, and generally in a slighter degree.

“4. Attrition murmurs are apt to undergo frequent and sudden changes of character and of situation (Stokes,) which are very pathognomic, because valvular murmurs change little in character, and not at all in situation.”

Signs and Diagnosis of Chronic Pericarditis.—These are similar, though less in degree than those of the acute disease. Its diagnosis is consequently more obscure.

Section third treats of the causes of pericarditis which are found in mechanical injuries; the general causes of inflammation, and

“*far above all, acute rheumatism,*” considering the importance of this cause he gives, in a note, the treatment of Dr. Chambers modified from that of Dr. Hamilton, as the most successful—we transcribe it.

“1. *In acute rheumatism.* After one full bleeding, or even two in robust subjects, but without any bleeding in the feeble and delicate, I give, every night, gr. vii of calomel with one and a half of opium, or gr. x. of calomel with gr. ij of opium, according to the age and the severity of the symptoms. This is followed every morning by inf. sennæ c. ℥iss, magnesiæ sulph. ℥ij, and mannæ ℥j, which should act at least four or five times. In addition, (though this is not a part of Dr. Chambers’ plan,) I generally give the following draught thrice a day, as it has appeared to me to expedite the cure—partly, perhaps, by the additional opiate, and partly by the sedative effect of the colchicum. \mathcal{R} vini colchici, m xv ad xx; pulv. ipecac. comp. gr. v; mist. salin. ℥x; syrupi, ℥j mft. haustus.

“When the pain and swelling are greatly abated, if not almost gone, (which often happens within two days, and almost always within four,) I omit the calomel, or, if the gums become in the slightest degree tender, I omit it even earlier.—The opium, I continue, to the extent of gr j or iss at bedtime, and in severe cases I add a grain at noon,—for, without an anodyne, the pains are apt to recur. I also continue the colchicum draughts and the senna draught.

“No local treatment is necessary beyond warm or cold applications, according as the patient finds them agreeable.

“If the slightest symptoms of pericarditis or endocarditis do supervene, a few additional doses of calomel and opium, (as gr. v of calomel with gr. j of opium every four or six hours,) will generally affect the constitution in twenty or thirty hours, which, with two or three cuppings or leechings on the præcordial region, almost always places the patient in a state of safety.

“2. *Active chronic rheumatism.* Here calomel and opium may be given in smaller doses, as gr. v of calomel and gr. j of opium, every night; but they require to be continued for a longer time, as five or six nights. Care should, however, be taken to stop short of pyalism, especially in the scrofulous. The other particulars of the treatment are the same as in the acute form. Local treatment, however, is more beneficial than in the latter: namely, the bleedings, if necessary, may be local instead of general, and blisters, liniments, plasters, &c. may ultimately be employed if a joint continues obstinately affected.”

Section fourth is an account of the progress, duration, terminations and prognosis of pericarditis. The progress and duration depend upon circumstances; it may be fatal in thirty or forty hours. The terminations are those of other inflammations, or, when complicated with endo-carditis, in valvular disease. Of the prognosis of a disease, at one time, so unfavorable, Dr. Hope encourages the most gratifying anticipations, as may be judged by the following remark:

“I have not treated a case for the last ten years on the plan presently to be fully described which did not terminate favorably in a week or ten days and often much less.” Dr. Pennock confirms this favorable prognosis.

Section fifth, containing his remarks upon the treatment of pericarditis, is most valuable. Prompt and energetic antiphlogistic measures are strongly urged, generally followed by local bleeding as occasion requires; but, to ensure a favorable termination, to remove absorption, and to prevent valvular disease, he most peremptorily insists upon the use of mercury; the more prompt its effect, the more certain the benefit; but he does not think ptyalism necessary to recovery. He gives from three to five grains of calomel, or from ten to fifteen of blue mass combined with a grain of opium three times a day. Mercurial inunction may be conjoined or substituted when there are objections to the use of mercury by the mouth. A tender state of the gums should be maintained for a week or ten days unless the symptoms completely yield. Repeated blistering may be used if, after the foregoing treatment, there is any lingering pain. In recurrent attacks, the treatment must be much more moderate. Dr. Pennock thinks that the energetic treatment of Dr. Hope would be injudicious in mild forms of the disease. In chronic pericarditis the treatment must be chiefly counter-irritant, mercury to a moderate extent; the diet may be more nutritious.

In section sixth, treating of adhesion of the pericardium, Dr. Hope does not think with Laennec and Bertin that this morbid alteration may take place without interfering with the healthy action of the heart. He considers it productive of hypertrophy and dilation. The signs of adhesion he regards as obscure, but he thinks that it may be known when the heart, which ought from enlargement to beat low down in the chest, beats as high up as natural, sometimes occasioning a prominence of the left præcordial ribs; from an abrupt, jogging or tumbling motion of the heart perceptible in the præcordial region. The value of the above signs is increased, if the previous history of the case records pericarditis. We now come to

Carditis, which is either general or partial. Of universal carditis

with general effusion of pus he knows of but one case on record, but not recognising as Laennec does, the effusion of pus as the only indication of carditis, he considers it not an unusual consequence of pericarditis, and treats of it more fully in his article on softening. The symptoms and treatment are the same as in peri-, and endo-carditis.

Partial carditis, with abscesses or ulcers, is not rare; abscesses are more so than ulcers. Ulcers are more frequent on the internal than the external surface of the heart. They cause sudden death by perforation. The signs vary and are not distinguishable from other affections, even by the lights of auscultation. Ulceration sometimes occasions rupture of the heart, and notwithstanding its greater thickness, this generally takes place in the left ventricle, from its contracting more energetically.

Endo-carditis.—Attention was first called to this affection by M. Bouillaud, but his views were generally considered theoretical. They were however adopted and extended by Dr. Hope. The following are the anatomical characters of acute endo-carditis.

“Redness of the internal membrane of the heart and arteries, an effusion of lymph or pus on its surface, and thickening, softening and ulceration of its substance and of the subjacent cellular and fibrous tissues; also, according to M. Bouillaud, the presence of adherent, colourless coagula of blood.”

A redness not characteristic of inflammation appears in the aorta, the pulmonary artery and the heart, from the imbibition of blood, and that of inflammation can only be determined by the other symptoms; thickening, effusion of lymph. Endo-carditis sometimes causes ulceration. Dr. Hope has never seen it result in gangrene; and he believes it may cause coagulation of the blood within the heart. From the ultimate organic changes it brings about, endo-carditis is one of the most formidable diseases in the nosology.

The signs of this affection are nearly the same as those of pericarditis; unless complicated with this latter disease there is but little, if any pain. After examining the symptoms in detail, Dr. Hope gives the following summary of them:

“This affection may be anticipated if a person be *suddenly* attacked with three

signs: 1. Fever; 2. Violent action of the heart; 3. A valvular murmur which did not previously exist, provided the murmur be well distinguished from an attrition-murmur, as the latter indicates pericarditis. The evidence is still stronger if the signs occur in connection with acute rheumatism."

Dr. Pennock says that auscultation gives one of the most striking evidences of the disease in a *blowing-murmur* in the first sound, varying in intensity from the gentle whiff to the most intense rasping sound, according to the intensity of the disease, the thickening of the valves, and the force of the cardiac circulation.

The prognosis of endo-carditis, under proper treatment is most favorable, and the disease is terminated in three or four days, or a week. The treatment is the same as in pericarditis and must not be less vigorous. Should it become chronic, the mild use of mercury and a counter-irritant, antiphlogistic course will be necessary. The use of mild sedatives as extr. hyoscyam., digitalis, infus. lupuli, may be continued for several months.

Acute and Chronic Arteritis, and Organic Diseases of the Coats of the Arteries.—Are the subjects treated of in the concluding chapter of part ii. The anatomical characters of acute arteritis are the same as those of endo-carditis. Dr. Hope takes some notice of what he thinks is improperly called erysipelatous arteritis, resulting from ligatures or injuries. He considers this a similar affection to phlebitis and that the unfavourable symptoms are caused by pus getting into the circulation. Chronic arteritis is more frequent than acute, it results in various degenerations and alterations of the arterial coats, although there are reasons for believing that these degenerations may arise independently of inflammation.

Chronic arteritis presents no symptoms by which it may be recognized, except those of the structural changes in which it results.

We now come to Part third, comprising organic affections of the heart and great vessels, as they are found in the pericardium; the muscular structure; the internal membrane and valves; and in the aorta. Hypertrophy first claims attention. He gives the following as the best classification of the varieties of this affection:

"1. *Simple Hypertrophy*, in which the walls are thickened, the cavity retaining its natural dimensions.

"2. *Hypertrophy with Dilatation*. This, (the *eccentric* or *aneurismal hypertrophy* of Bertin,) presents two varieties, viz:—

"A.—With the walls thickened, and the cavity dilated.

"B.—With the walls of natural thickness, and the cavity dilated: i. e. *hypertrophy by increased extent of the walls*.

"3. *Hypertrophy with Contraction*. In this, (the *concentric hypertrophy* of Bertin,) the walls are thickened, and the cavity is diminished."

Of the *natural dimensions and weight of the heart*—he gives the estimates of Laennec, Bouillaud, and Clendinning. The editor adds, with a detail of the mode in which they were made, the minute estimates of M. Bizot of Geneva. The following extract from the Croonian Lectures of Dr. Clendinning, gives the result of his investigations.

"The normal heart may be assumed to average for the whole life, above puberty, about 9 oz. in absolute weight, and 8½ oz. in bulk, for the male; and 8 oz. or a little more in weight, and 7½ oz. or a little more in bulk for the female; and to bear after death to the person, for the male, the rate of about 1 to 160, and for the female, of 1 to 150."

Anatomical Characters of Hypertrophy.—Of these, enlargement is the most prominent, a case is adduced in which the organ weighed two pounds and a half, a corresponding change of position accompanies the enlargement, and the heart becomes more spherical. It may affect one, several, or all the cavities; but the ventricles are more generally affected. Except in aged or anæmic subjects, the muscular substance is redder than natural.—Dr. Pennock remarks that the changes in the muscular structure are influenced by the character of the constitution. In vigorous constitutions it becomes more red and firm; in the leuco-phlegmatic, softened, flabby and dilated. Hypertrophy is produced in the heart as in other muscular structures, by any thing which causes increased action and a consequent increased afflux of blood, and consequently *exciting causes* may be either nervous, embracing moral emotions, or mechanical, accelerating or obstructing the passage of the blood. Among the latter are all violent and long continued physical efforts. The passage of the blood may be obstructed by diseases of the heart, its valves and vessels; all diseases of the chest obstructing the circulation

through the lungs. The following he thinks one of the most frequent sources of hypertrophy.

“Long, stiff stay-bones or wooden *busks*, which, by fixing the abdomen, prevent the descent of the diaphragm, and, when the abdomen is flatulent, act with the power of a long lever in depressing the sternum. The effect takes place *even though the stays be not very tightly laced.*”

When the circulation is obstructed the cavities are affected in succession according to their proximity to the obstruction, and the left ventricle, being the first to feel obstructions in the arterial system, is most liable to hypertrophy. By contraction of the mitral valve the succession of morbid changes results in exposing the lungs to increased impulse of the right ventricle from behind, without the means of unloading in front, and causes pulmonary apoplexy. Permanent patescence of the mitral valve oppresses the auricle and imposes upon it the pressure of the ventricle, and the effect of this obstruction, like that of contraction, may be propagated backwards to the right side. An impediment in the lungs is first felt by the ventricle. An obstruction in the right auricle is conveyed through the venous to the arterial system and so again around to the heart. The causes of hypertrophy are also those of dilatation. The following are the combinations of these affections in the order of their frequency:

“1. Hypertrophy with dilatation of the left ventricle, and a less degree of the same in the right.

“2. Hypertrophy with dilatation of the left ventricle, with simple dilatation of the right.

“3. Simple dilatation of both ventricles.

“4. Simple hypertrophy of the left.

“5. Dilatation with attenuation of the left.

“6. Hypertrophy with contraction of the left.

“7. Hypertrophy with contraction of the right.

Of the Auricles.

“1. Distention, particularly of the right, from congestion during the period of dissolution.

“2. Dilatation with hypertrophy.

“3. Simple hypertrophy.

“4. Hypertrophy with contraction, which is almost unknown.”

The next section is devoted to a consideration of the pathological effects of hypertrophy; and their effects are very different and

apparently of opposite characters, according to the duration and progress of the disease.

“Pure hypertrophy at first gives rise to increased force and activity of the circulation; and that, when this force surmounts the natural tonic power of capillaries, (which is apt to be the case in the late stages of the disease,) congestion, infiltration, and the other phenomena of an obstructed circulation, ensue.”

He then shows a very important connection between hypertrophy and apoplexy, and believes with M. Richerand and M.M. Bertin and Bouillaud, that “hypertrophy forms a stronger predisposition to apoplexy than the apoplectic constitution itself,” and sustains this view, not only by a philosophical examination of the effects of hypertrophy, but by numerous cases.

Signs and Diagnosis.—The general and physical signs must be taken together to indicate the disease. The *general signs* are palpitation, and in the advance of the disease, dyspnœa—cough—hæmoptysis. The pulse undergoes various modifications.

“Thus, in simple hypertrophy, it is stronger, fuller, and more tense than natural: it swells gradually and powerfully, expands largely, *dwells long under the finger*, and in anæmic subjects, (but no others,) is sometimes accompanied with a thrill or vibration.”

In hypertrophy, with dilatation of the left ventricle, when the dilatation predominates over the hypertrophy “the pulse though still full and sustained is soft and compressible.” From accidental debilitating causes, or from nervous depression it may present exceptions to these characters. From great engorgement the pulse may become small and weak. Most cases are accompanied by cerebral affections, the complexion is heightened, particularly in those of florid color, until the capillaries labor, and then the color changes to purplish. Serous infiltration is among the late signs. Angina cordis is not an essential, although a general attendant, and is most intense in ossification. The distinctive general signs of hypertrophy of the right ventricle are:

“1. Absence of the strong, large, and prolonged pulse of hypertrophy of the left ventricle, in the few cases in which the right alone is hypertrophous: 2. turgescence of the external jugular veins accompanied by pulsation synchronous with that of the arteries.”

Hypertrophy of the auricles has no distinctive signs, and its detection is not important.

The principal of the *physical signs* are, a strong, slowly heaving impulse followed by the diastolic impulse, and it is best estimated by the ear and the stethoscope. "The diastolic impulse may be absent if the hypertrophy is not great." Both these signs attend hypertrophy with contraction also, though the impulse may not extend much beyond the præcordial region. Hypertrophy with dilatation unites the signs of these affections, whilst dilatation predominates, the impulse though not considerable, is peculiar, the beats:

"Are strong, hard, and produce a shock analogous to the blow of a hammer; but the blow seems to strike a small space, it expends itself, as it were, on the thoracic parietes, and does not communicate to the head a heaving proportioned to its force: it differs, in short, from the impulse occasioned by great hypertrophy, in the circumstance that, in the latter, the ventricles in a distended state, seem to heave with their whole length against the thoracic parietes, which yield to the effort; while, in the former case, the point only of the heart seems to strike the parietes with a sharp, smart, accurately circumscribed blow, only capable of producing a sort of concussion, rather than a real heaving."

In the early stages of these affections, unless complicated with valvular disease, the beats are rarely, except they may be accidentally, irregular. The *sounds* of the heart are deadened by hypertrophy. In proportion to the degree of simple hypertrophy the first sound becomes prolonged and dull, the second sound is very feeble and the interval of repose is shortened. In *hypertrophy with contraction* the sounds are proportionably weaker. In *hypertrophy with dilatation*, the sounds are louder than in any other disease of the heart. The first sound derives from dilatation "a loud abrupt commencement, and from hypertrophy a prolonged termination." When dilatation predominates the first sound is not so loud, is not prolonged, but is smart and short.—*Resonance* is deficient in simple hypertrophy, but most so when dilatation is added. *Prominence* of the præcordial region, being a late sign, is of minor importance. Dr. Pennock remarks, that when it is caused by hypertrophy respiration is observed, but this is absent when the prominence arises from the effusion of pericarditis.

The progress and terminations of hypertrophy are influenced very much by its complications, and by the constitution. Unless there are exciting causes, simple hypertrophy may exist for a long

time without inconvenience; this form is more apt to terminate in apoplexy and palsy.

The prognosis is favorable in the early and unfavorable in the advanced stages of the disease.

The treatment. Dr. Hope, as he does not assent to the treatment of Albertini and Vasalva as approved by Laennec, gives first a sketch of it. He objects strongly to frequent bleedings at short intervals, and thinks the principle should be to "diminish the quantity, without deteriorating the quality of the blood," hence he recommends small bleedings at long intervals.

"Four, six or eight ounces of blood should be taken every two, three, four, or six weeks, according to the age and strength of the patient, so as merely to keep down palpitation, dyspnœa, and strong impulse of the heart. If the head be much affected, the blood should be drawn by cupping from the nape of the neck; but it must be clearly understood that, in case the cerebral symptoms amount to an indication of apoplexy, or of inflammation of the brain, the practitioner must not consider himself limited to the number of ounces above stated, but must bleed according to the principles which regulate the treatment of these affections."

He cautions against being deterred from bleeding by the languid or oppressed pulse of plethoric individuals,

"The diet, in plethoric persons who rapidly reproduce rich blood, should, for the first month or two, consist exclusively of white fish, farinaceous articles, and vegetables: subsequently, a moderate proportion of animal food may be allowed on alternate days. In ordinary, average constitutions, the latter diet may be permitted from the first. In weakly constitutions, and in advanced stages of the disease, when anæmia has either already appeared, or would easily be induced by an insufficiently nutritious diet, animal food should be permitted daily. Whatever be the constitution, the patient should never overload his stomach with an immoderate meal, nor eat heartily during a state of exhaustion from fatigue or fasting, as a degree of palpitation is almost sure to be the consequence. His meals should be evenly distributed, and each should be light. Though three meals, at intervals of five hours, are generally sufficient, a fourth in a light form is better than immoderate indulgence at any one. The food should be perfectly plain and simple; since dyspepsia, by exciting palpitation, greatly aggravates diseases of the heart."

The diet should be dry; what drinks are taken unstimulating, except where previous habits, or dyspeptic debility may require a little brandy and water, or a glass of sherry. Exercise must never be hurried or long continued. Saline purgatives should accompany the first bleeding, and be used when the action of the heart appears to increase. For this purpose he recommends one or two drams of sulph. magnes. twice or thrice daily in infus. Rosar.

with the addition of an equal quantity of comp. infus. of orange peel, and six or eight minims dilute sulph. acid, to obviate debilitating effects on the intestinal canal. Diuretics are useful, and when dropsy appears, these with hydragogue purgatives must be used efficiently. Attention must be paid to the stomach and liver, and irritability of the nervous system corrected by sedatives—digitalis, humul. tinct. extr. hyoscyam. Dr. Pennock calls attention to the use of hydrocyanic acid under the same circumstances. Dr. Hope thinks hyd. potass. useless. He cautions against forgetting, that palpitation and nervous irritability may arise from anæmia, requiring a more nutritious diet. The treatment must be pursued for one, two or three years, and must not be relaxed from apparent improvement or recovery in a short time.

In an appendix to hypertrophy he has recorded the doubts thrown by Cruveilhier over the existence during life of hypertrophy with contraction.

We next come to the subject of the second chapter—Dilatation of the Heart, which presents the three following varieties:

“1. *Dilatation with hypertrophy*, in which the cavity is enlarged and the walls thickened.

“2. *Simple dilatation*, in which the cavity is enlarged, and the walls of their natural thickness.

“3. *Dilatation with attenuation*, in which the cavity is enlarged and the walls attenuated.”

The anatomical characters of the two first are described in the chapter on hypertrophy. In dilatation with attenuation, the attenuation sometimes reduces the most substantial part of the left ventricle to a few lines thickness, and the apex to a membrane. It occurs more in a transverse than longitudinal direction and gives the heart an unusually spherical form. Distention of the auricles during the last moments of life may be mistaken for dilatation. A distended auricle is tense and shows the blood through its thinnest parts,—a dilated is not so tense and is more opaque. The editor gives in this section the tables of Bouillaud, of the dimensions of the orifices of the heart.

Dilatation is the mechanical effect of over distention, and may be caused by

“1st, deficient power of the heart, whether congenital or acquired, in proportion

to the system: 2d, in general terms, all obstructions to the circulation, whether situated in the orifices of the heart, or in the aortic, or pulmonary system."

Auricular dilatation seldom occurs except from valvular disease.

Treating of the pathological effects of dilatation, Dr. Hope controverts the opinions of Bertin and Bouillaud, that dilatation is not a primitive affection. He contends that from loss of power in the heart it may be, and whether primitive or consecutive its pathological phenomena are all those of an obstructed circulation.

The general signs, are those of obstructed circulation; the palpitations are feeble, the pulse soft and feeble, extremities and surface chilly, disposition melancholy, with lessened energy. The lungs present all the evidences of difficult circulation; cough, dyspnœa, and thin mucus expectoration. The engorgement propagated from the lungs to the right side of the heart gives rise to serous infiltration, discoloration of the face, congestion of the brain, injection of the mucous membranes, passive hæmorrhages, congestion and enlargement of the liver, and as an "adventitious complication," angina. The general signs of dilatation of the right ventricle are equivocal. With Laennec, Dr. Hope regards turgescence of the external jugular veins, without pulsation as the most characteristic.

The physical signs of dilatation with attenuation present, a diminished impulse, the two sounds the same and only to be distinguished by their situation.

"My own mode of estimating the degree of dilatation, is by observing how far the first sound resembles the second, and comparing the intensity of the first, heard immediately over the ventricle affected, with what I conceive, from experience, would be its intensity in the same subject if the heart were healthy.

"The manner in which I judge of attenuation by the first sound, is less by its loudness, than by its greater shortness and clearness—its more complete assimilation to the second sound."

Dilatation diminishes the resonance of the præcordial region. Moderate dilatation is not formidable, and even when it increases so as to cause dyspnœa, by quietude and proper treatment it may be kept stationary.

The treatment of dilatation with attenuation consists in the removal of all exciting causes and occupations; quietude, a light and nutritious diet, a clear dry bracing air, and the shower-bath,

except in pulmonary complications. The general health must be improved by the use of bitters, mineral acids and chalybeates ; by proper clothing the action of the surface must be maintained.— Attacks of dyspnœa are relieved by immersing the extremities in warm water. Blood-letting must not be used during the paroxysm; if it is found to be necessary at all, it may be resorted to during the remissions in small quantities, at intervals of one, two, or three months, *provided it does not diminish the strength. Bleeding does not properly constitute part of the treatment for dilatation with attenuation.*

Chapter iii., consists chiefly of a paper of Mr. Thurnam, from the xxi vol. 1838, Medico-chirurgical Trans., upon partial dilatation. There are no diagnostic symptoms of this disease. Dr. Hope thinks that from the accuracy of valvular diagnosis, if murmurs are noticed not belonging to valvular disease or to those of pericarditis, they may by careful collection and observation make out the diagnosis of this affection. We then come to

Softening of the Heart, which has been generally divided into the *red, yellow* and *whitish*. Laennec attributes this change to derangement of nutrition, Bouillaud to inflammation. Dr. Hope thinks these different opinions partly right and partly wrong ; that each variety may originate in inflammation or without it. The red corresponds with the first stage of carditis; the whitish with a more advanced stage, and the yellow is the result of chronic inflammation. When softening is not the result of inflammation, it is the consequence of debilitating diseases—scurvy, anæmia, typhus. Softening from acute inflammation is the concomitant of peri-, or endo-carditis; its *general signs* are those of these diseases, and when it results from other diseases, it is marked by their symptoms. The *physical signs* are those of enfeebled muscular action. The impulse is weak, intermittent and irregular; the sounds are weak and “the first sound becomes short and flapping like the second.” This character is diagnostic of softening from hypertrophy. Softening has the same pulse as disease of the mitral valve, but if no murmur be found to attend either sound of the heart, and the character of pulse cannot be traced to any temporary affection, it may be attributed to softening. The *prog-*

nosis of softening depends upon the character of the derivative disease, and it greatly augments the danger of those affections with which it is complicated. Its treatment is the same as that of the primary affection.

The four succeeding chapters relate to certain rare and obscure affections: induration, of which the treatment is the same as in hypertrophy; excess of fat marked by diminution of sounds, irregular pulse without valvular disease, and oppression. When the two latter signs occur in conjunction with the first, they indicate excess of fat rather than hypertrophy, as they do not appear in the first stages of that disease. The treatment is such as tends to diminish obesity. Osseous, cartilaginous, and other accidental productions sometimes appear in the muscular structure of the heart as the result of other affections; as Dr. Pennock remarks, their symptoms are obscure, and we are not "in possession of any definite knowledge of the truly characteristic symptoms." The heart like other muscles, is subject to atrophy. It generally takes place under the influence of emaciating causes, and its treatment is the same as those of these causes. We now come to

Diseases of the Valves and Orifices of the Heart.—The orifices of the heart and their valves are subject to several morbid degenerations, affecting the base and free margin of the valves more than the intermediate parts. They are fibro-cartilaginous, ossific, steatomatous degenerations, or warty vegetations, resembling those of a syphilitic character on the external organs of generation. They are also liable to be atrophied. The left side is far more frequently affected than the right. Dr. Hope, with Corvisart, attributes this difference to the more fibrous organization of the left valves, by which they are more ready to receive ossific or cartilaginous matter. The effect of these diseases is to obstruct the orifices, and they are called by C. J. B. Williams, obstructive or regurgitant, according as they obstruct the current of blood or give it a reverse direction. No great inconvenience results from valvular disease so long as it is not complicated with dilatation, hypertrophy, or softening. Dr. Hope calls attention to the "immense practical importance" of keeping this in view, as we know

that the most efficacious treatment, is that which prevents the supervention of these diseases.

The general signs of valvular diseases are an aggravated form of those belonging to dilatation, and certain others which are peculiar and distinctive, among the most important of these are the peculiarities of pulse produced by diseases of certain valves. These claim particular attention, inasmuch as they have been either passed by, or slightly and erroneously stated by preceding writers, and Dr. Hope has been, since 1823, endeavouring to elucidate this matter, for which purpose he has taken notes in the last four and a half years in 10,000 cases.

While Corvisart, Louis and Bouillaud state that the pulse in *contraction of the aortic valves* is small, and invariably and permanently irregular, Dr. Hope contends that such is not the case unless the contraction is very great. He gives the following

TABLE OF PULSES OF DISEASES OF THE HEART.

"SIMPLE HYPERTROPHY OF LEFT V.—*Strong and tensely prolonged*; because the ventricle contracts powerfully but slowly.

"HYPERTROPHY WITH DILATATION.—*Strong, tensely prolonged, and large*; because the ventricle contracts powerfully, slowly, and expels an increased quantity of blood.

"N. B.—If the above pulses be moderately accelerated, they become "*Hard.*" They may be rendered temporarily or permanently *small and weak* by any debilitating causes, impairing the contractile power of the heart. Also, by extreme palpitation and dyspnœa causing engorgement of the organ.

"HYPERTROPHY WITH CONTRACTION.—*Tense but small*; and if the contraction be considerable, it becomes weak as well as small, from the insufficient quantity of blood propelled into the arteries.

"DILATATION WITH HYPERTROPHY, *i. e.* the dilatation being predominant—*Large* and rather *prolonged*, but *soft*; from the large capacity, but weakness of the ventricle.

"N. B.—This pulse, if accelerated, becomes "*Bounding.*"

"DILATATION WITH ATTENUATION.—*Large* and *weak*, becoming *small* in the last stage, when the ventricle is too weak to expel its contents.

"SOFTENING.—*Small, weak*, and more or less *irregular, unequal* and *intermittent*, sometimes extremely so, in the late stages; from the debility of the ventricle.

"FREE REGURGITATION THROUGH THE AORTIC VALVES.—*Eminently jerking*; from the arteries being unfilled.

"CONTRACTION OF THE AORTIC VALVES.—*Strength* little impaired, unless the contraction be very considerable. The *regularity* is seldom affected, except by extreme contraction.

"GREAT CONTRACTION OF, OR FREE REGURGITATION THROUGH, THE MITRAL VALVE.—*Small, weak, irregular, intermittent and unequal*; because contraction occasions an insufficient and irregular supply of blood to the ventricle; and because regurgitation weakens the pulse, in consequence of the resistance of the mitral valve being removed, and disturbs its regularity, in consequence of rendering the supply of blood less uniform.

"A LARGE POLYPUS FORMED BEFORE DEATH.—Suddenly causes a small, weak, irregular, and intermittent pulse; because the polypus chokes up the ventricle.

"ENDOCARDITIS WITH POLYPUS.—Ditto.

"PERICARDITIS WITH MUCH SEROUS EFFUSION COMPRESSING THE HEART.—Ditto.

"*Remarks.*—I hope hereafter to show that these pulses imitate all those produced by ordinary diseases, &c.:—consequently, that, unless the pulses of disease of the heart be abstracted, the pulse is but a fallacious guide in other diseases. As this abstraction, in a complete manner, has hitherto been impossible, in consequence of the imperfect state of our knowledge respecting the pulses of disease of the heart, the present table is an attempt to supply that deficiency."

Physical Signs.—Upon this subject Dr. Pennock adds from Williams' lectures this important rule for locating the respective murmurs:

"*By the different directions in which the sonorous currents spread the sounds, and the different manner in which they are transmitted to the walls of the chest. Thus murmurs generated at the origin of the arteries will generally be more or less transmitted in the direction of the current along these arteries; and those produced in the auricular orifices will be conducted both by the current into the auricles, and by the tightened cords and fleshy columns to the apex of the heart, which is generally more or less in contact with the ribs.*"

In disease of the aortic valves a murmur is heard during the ventricular contraction

"On the sternum, opposite to the lower margin of the third rib, and thence for about two inches or more upwards, along the course of the ascending aorta towards the right; and it is louder in these situations than below the level of the valves.—Its pitch or key is usually that of a whispered *r*, from being superficial, and it accordingly conveys the idea of being pretty near to the ear. When a murmur of this kind is considerably louder along the tract of the ascending aorta than opposite to its valves, and is, at the same time, unusually near-sounding and superficial—in other words, on a higher key than a whispered *r*, it proceeds from disease of the ascending aorta itself. As the murmur from this cause is audible in the situation of the valves, it might lead to the supposition that they also were diseased, and it is sometimes very difficult to ascertain positively that they are not. That a murmur is seated in the aorta, and not in the pulmonary artery, may be known by its being inaudible or very indistinct high up the course of the pulmonary artery, while it is distinct high up that of the aorta. That a murmur is seated in the aorta or its valves, and not in the auricular valves, may be known by its sounding loud

and *near* above the aortic valves, where an auricular murmur, if audible at all, sounds feeble, *remote*, and on a low key, like a whispered *who*.

“When there is regurgitation through the permanently open aortic valves, a murmur accompanies the second sound, and its source may be known by the following circumstances:— 1. It is louder and more superficial opposite to and above the aortic valves than about the apex of the heart, by which it is distinguished from a murmur in the auricular valves with the second sound. 2. It is louder along the course of the ascending aorta than along that of the pulmonary artery, and down the tract of the left ventricle than down that of the right; by which circumstances its seat is known to be in the aortic, and not in the pulmonic valves. This inference is strongly corroborated by the state of the pulse, which, when the aortic regurgitation is at all considerable, is singularly and pre-eminently jerking—the pulse of unfilled arteries. 3. It is distinguished from a systolic murmur in the aortic orifice by its accompanying the second sound; by its being more audible, (though with a gradual diminution,) down the course of the ventricle, than a systolic murmur; by its being prolonged through the whole interval of repose, and even through accidental intermissions of the ventricular contraction (case of W. Esq.); and by the weakness of the reflux current always imparting to it the softness of the bellows-murmur, an inferior degree of loudness, and a lower key, like whispering the word *awe* during inspiration. It often becomes musical.

Unless the heart is displaced purring tremor is not heard, and the aortic valves must be very much contracted to produce irregularity of the pulse.

In diseases of the pulmonic valves the signs are the same as above, except that the murmur is closer to the ear, and is on a higher key. From its being along the course of the pulmonary artery it is known not to proceed from regurgitation through the auricular valves.

“When a murmur in the pulmonary artery is considerably louder between the second and third left ribs, close to the sternum, than opposite to the valves, and is there attended with impulse and purring tremor, dilatation of the pulmonary artery may be suspected.

“When there is regurgitation through the pulmonic valves, a murmur accompanies the second sound. Its nature and diagnosis are the same, (the necessary inversions being made,) as in the case of aortic regurgitation.”

Mitral Valve.—When this is permanently open the first sound is attended with a murmur, rough or smooth according to the nature of the contraction, the force of the circulation and character of the blood. It is on a low key, “but sounds loud and near if explored about the apex of the heart, and to the sternal side of the nipple.” Purring tremor is produced more frequently by mitral regurgitation than by any other lesion. In great contraction of

the mitral valve, a murmur attends the ventricular diastole or second sound. It is very feeble, and is best heard in the same situation as the murmur from regurgitation.

The Tricuspid has the same murmurs, except that they are loudest on or near the sternum, on the same level with the mitral.

In conjoint disease of the arterial and auricular valves, the murmurs are combined. The arterial must be explored as high up the vessels, and the auricular as low down the heart as possible. *Valvular* are distinguished from inorganic murmurs, by the latter being confined to the aortic orifice and to the first sound.—With this assertion Dr. Pennock does not agree. He has heard it over the apex of the heart, when not found on the sternum, and therefore it was located in the mitral valve. The inorganic murmur is always weak and of the bellows kind, is attended with continuous, venous, jugular murmur in the anæmic, and in them, and also in the irritable exists during temporary excitement. It is cured with the anæmia by the use of iron and animal food.

“Contrasted with the above, the distinctive characters of valvular murmurs are,
1. That they are not, like inorganic murmurs, restricted to the aortic orifice and first sound, but may be connected with any of the four orifices and with either sound in each: 2. That they persist without intermission for an indefinite length of time, even though the heart be kept in a state of perfect calm: 3. That they are often of a *rough* character, that is, filing or rasping; whereas, inorganic murmurs have always the softness of the bellows-sound.”

Dr. Hope concludes with some cases of curious and unusual sources of murmur liable to be confounded with valvular disease. These are cases of pressure of an indurated lung upon the aorta, pressure from tight vests and from ascites.

A very valuable portion of this chapter is that upon cardiac asthma. He gives the following varieties of asthma:

- “1. From *chronic dry catarrh*, and the emphysema resulting from it.
- “2. From *pituitary catarrh* (humoral asthma) whether acute or chronic, but more especially the latter, and the pulmonary œdema resulting from it.
- “3. From *mucous catarrh*, especially chronic.
- “4. From *organic disease of the heart*.
- “5. From purely *spasmodic constriction* of the bronchial tubes.”

The asthmatic effects in each of these diseases is produced by one or more of the following causes:

- “A. *Insufficient admission of air into the bronchial tubes and air-vesicles.*

“B. *Insufficient exposure of the blood to the air admitted, in consequence of a less pervious state of the mucous membrane than natural.*

“C. *Insufficient admission of blood into the lungs.*

He notices the mode in which these effects result from the foregoing diseases. Disease of the heart causes inadequate oxygenization of the blood, when from hypertrophy of the right ventricle, or obstruction on the left side of the heart, there is an accumulation of venous blood in the lungs; also, when the lungs are insufficiently supplied with blood in consequence of weakness of the right ventricle, an obstruction at its mouth, or increased resistance in the lungs. Asthma from disease of the heart, Dr. Hope thinks comprises the greater number of severe and fatal cases.

Treatment of valvular disease.—Valvular disease from inflammation may in the majority of cases be prevented by a strict antiphlogistic and mercurial treatment, and when it results from other causes, the treatment must be to prevent its increase, to obviate hypertrophy and dilatation, and to relieve obstructions of circulation.

“The remedies calculated to answer these indications, are, in general terms, such as diminish the force and activity of the circulation: namely, occasional venesection to a moderate extent, [conjoined with topical depletion,—P.] in certain cases; an unstimulating and rather spare, though sufficiently nutritious diet; a tranquil life, with respect both to the body and the mind; and a good state of the digestive organs and alimentary canal.

“The extent to which any remedy must be carried, can only be determined by the particular circumstances of each case. If, for instance, the patient be robust and plethoric, depletory measures may be pursued to a greater extent, and *vice versa*. In general, if the valvular obstruction is not very considerable, and there is no hypertrophy or dilatation, and no tendency to plethora, an abstemious light diet, comprising a moderate proportion of animal food, and a scrupulously tranquil life, with a regular state of the bowels, constitute all the prophylactic treatment that is necessary; and it is satisfactory to know that, by these means, danger may in many instances be completely averted. I have several times known patients with a moderate—even with a rather considerable valvular obstruction, attain the age of sixty, seventy, and even eighty, though the symptoms, judging from their account, had commenced in early life.”

When dropsy supervenes, hydragogues, diuretics and diaphoretics may be used. In asthma from cardiac disease, emetics cannot be used without injury and danger. Expectorants are useful to relieve an asthmatic paroxysm. Antispasmodics are useful aux-

iliaries, but must not be depended on; their effect is increased by the addition of digitalis.

The subject of the next chapter is *Aneurism of the Aorta*; of which, Dr. Hope enumerates the four varieties.

"1. *Dilatation*, which is an enlargement of the whole circumference of the artery.

"2. *True aneurism*, which is a sacculated dilatation of a portion only of the circumference, or of one side of the artery.

"3. *False aneurism*, which is formed by ulceration or rupture of the internal and middle coats, and expansion of the external or cellular into a sac. It is called *primitive* when all the coats are divided, as by a wound; and *consecutive* when it is consequent on ulceration or rupture of the internal and middle coats.

"4. *Mixed aneurism*, which is a supervention of false upon true aneurism, or upon dilatation: that is, after dilatation either partial or general of all the three coats, the internal and middle burst, and the external alone expands into a further sac, surmounting the original dilatation or true aneurism."

To these Dr. Pennock adds the *dissecting aneurism* from rupture of the internal and partial laceration of the middle coats, by which the blood dissects the middle from the external coat.

The pathological effects of aneurism are those of pressure and destruction of the surrounding parts. They cause destruction of the vertebræ, and, by irritation of the spinal nerves, produce neuralgic and paraplegic symptoms.

In his section on the "signs and diagnosis of aneurism of the aorta," he remarks, that there is but one unequivocal general sign; that is, the appearance of the aneurismal tumor. Dr. Hope does not agree with Laennec, that obscurity is thrown over pectoral aneurism, from its sound being confounded with that of the heart. We pass on to his synopsis of the conjoint general and physical signs in each variety of aneurism.

"*Simple Dilatation of the Arch, and ascending Aorta.—Physical Signs.—1.* A constant pulsation above both clavicles at their sternal ends; stronger on the right side if the enlargement is confined to the ascending portion, and never communicated to the sternum or ribs, unless the dilatation be enormous.

"2. A hoarse rasping murmur, synchronous with the pulse, above both clavicles, of brief duration, commencing and terminating abruptly. If the enlargement is confined to the ascending portion, the sound is louder above the right than above the left clavicle; and, along the tract of the aorta up the sternum, it is superficial, and often of a hissing or whizzing character; by which, and by the murmur being loudest high up the chest, it is distinguishable from that of diseased aortic valves.

It is usually distinct on the back, where the ventricular sounds, if audible at all, are very obscure.

"3. A purring tremor above the clavicles, but never below. It is stronger, and the concomitant sound more grating, in proportion as the interior of the aorta is more overspread with hard, and especially osseous inequalities.

"*General Signs of Dilatation.*—Frequently none. When any exist, they are a slight degree of those common to all organic diseases of the heart, viz: the signs of an embarrassed circulation. They may assume a most aggravated aspect when dilatation becomes complicated with organic disease of the heart."

In *anæmia* and *aortic regurgitation* the same indications may present above the clavicles. In the former, the impulse is "feebler," and the sound "more a brief whiff." The latter may be known by its distinctive signs.

Dilatation of the Pulmonary Artery.

"1. A pulsation with purring tremor between the cartilages of the second and third ribs on the left side, and thence in a decreasing degree downwards, *but not appreciable above the clavicles.* Also a slight prominence between the same ribs.

"2. An extremely loud, superficial, harsh, sawing sound, audible above the clavicles and over the whole præcordial region, but loudest on the prominence between the second and third ribs."

The pulsation between the cartilages of the second and third ribs will distinguish this from aneurism of the aorta, and in the latter there would be murmur or tremor above the right clavicle.

Sacculated aneurism is known by a pulsation above and below the clavicles but usually stronger below, the abrupt murmur described under dilatation but weaker and softer or less rasping, and a purring tremor above the clavicles. The general signs are the external appearance of a pulsating tumor, a gnawing pain in the spine, pain in the left arm, axilla, scapula, shoulder and neck, difference of pulses, a strong double jogging impulse of the heart.

Pulsating glands may be known from this aneurism by the absence of the aneurismal sound; of impulse and tremor above the clavicles; and a want of proportioned disturbance of the circulation.

Hydropericardium, instead of a powerful aneurismal heaving, has an irregular undulatory motion, strongest in the left præcordial region.

An enlarged heart has an impulse, strongest at the apex; that

of an aneurism is strongest on the tumor. *Varix of the jugular veins* wants the sound and impulse, and is compressible. *Enlarged glands* above the clavicles rarely occasion sound. *Subclavian* and carotid aneurisms have sound, pulsation, and tremor on the affected side only. *Purring tremor* from mucous rattle ceases when respiration is suspended.

Sacculated Aneurism of the Abdominal Aorta is known by a constant swelling pulsation of extraordinary power, by the altered lateral dimensions of the aorta, dulness on percussion, if large; if small, it may be obscured by intestinal flatus; a brief, abrupt bellows sound, not so loud as in pectoral aneurism, sometimes audible on the back. This murmur may often be developed, as suggested by Dr. Corrigan, by placing the patient on the back. A murmur occasioned by pressure of the stethoscope on a superficial vessel, may be known by its *nearness* and hissing sound.—It is difficult to give a positive diagnosis. Visceral enlargements, tumors and accumulations, may be known by their more feeble impulse, particularly in a lateral direction; by moving with the viscera, with which they are connected, by yielding to purgatives, being more incompressible, the murmur being less, and finally by the history of the case.

Anæmic pulsation, may be known by the general condition of the patient, the impulse being a smart vigorous jerk, and the sound a short whiff. The stethoscope may be pressed so as to feel the natural calibre of the vessel.

An *aortic pulsation* attends enteric inflammation. It is removed by treatment suitable to the disease.

In an appendix to this chapter, Dr. Hope gives two cases from which he draws the pathognomonic signs of

Aneurism of the origin of the aorta opening into the right ventricle, and of *aneurism of the aorta opening into the pulmonary artery*, with the diagnosis of these affections from such as they might be confounded with.

He disapproves of the treatment of Albertini and Valsalva for aneurism of the aorta, fully examines the objections to it, and recommends the following course:

“The patient should, in the first instance, be pretty copiously bled, from twelve

to twenty ounces being drawn, according to the age and strength. After this, it will generally be sufficient to abstract ℥vi or viii every three to six or more weeks, the quantity being the larger, and the interval shorter, in those who are robust and plethoric, and speedily reproduce blood. An increase in the strength of the pulse, and of the pulsations of the tumor, should be the signal for the depletion. But when the first signs of anæmia display themselves by slight paleness of the complexion and lips, a little jerk in the pulse, a sense of palpitation of the heart, and a feeling of general debility, bleeding should be entirely suspended till this state has been completely removed; for it indicates that the depletion has already been carried a little too far."

Purgatives and diuretics may be used with advantage. The neutral salts are the best ordinary purgative; and elaterium when a "powerful effect is required." Digitalis is very useful, and also the acetate of lead: this is best given in two or three grain doses every four hours, washed down by a draught containing half an ounce of vinegar. Uninterrupted corporeal and mental quiet must be maintained—ice to the tumor is sometimes useful, and also leeches when there is much pain. The treatment must be persisted in for one, two, or three years. Anæmie and nervous pulsation requires a tonic and bracing treatment. This part of the work is concluded by a chapter on congenital malformations.

Part fourth treats of nervous affections, which are either those of excessive excitement, *angina pectoris* and *palpitation*, or that in which it is deficient, *syncope*. *Spasm* and *convulsions* he believes to be imaginary.

Angina pectoris originates from any cause, functional or structural, capable of irritating the heart; the chief point is to ascertain whether there be disease of the heart by the signs heretofore given.

The treatment of *angina pectoris* must be governed by the nature of the primary affection.

Nervous palpitation from inorganic causes demands particular attention, from its liability to be mistaken for organic disease.—It may be known

"By the palpitation occurring only occasionally: by its not being excited, but, on the contrary, relieved by corporeal exercise of such a nature as would certainly disturb the action of a diseased heart: by its disposition to supervene while the patient is at rest, especially at the commencement of the night, when he lies wakeful in bed; by a fluttering in the epigastrium; by the general prevalence of nervous symptoms; by the affection being aggravated when the nervous symptoms

undergo an exacerbation; by the pulse and the action of the heart being natural during the intervals between the attacks; and by the absence of valvular and aortic murmurs, and of undue impulse."

Palpitation from anæmia is the condition usually denominated *chlorosis*, the tint being caused by the withdrawal of the pink color from the skin by anæmia.

"The *general symptoms of anæmia* may be rapidly sketched as follows.—The complexion is unusually, and sometimes singularly, pallid or exsanguine; the lips, the interior of the mouth, and the inside of the palpebræ, partake more or less of the same paleness; the pulse is quick, small, weak and *jerking*, (the pulse of unfilled arteries,) and during palpitation it often presents a thrill; its average frequency is generally above 80 or 90, and under excitement it is easily raised to 120 or 130, and occasionally even to 140 and 150: the slightest causes, including all corporeal efforts, suffice to induce palpitation, breathlessness and faintness; whereas mere dyspeptic palpitation is usually relieved by exercise; the body is usually constipated; there is anorexia, with an especial distaste for animal food, and a predilection for sour articles, as acids, acid fruits, salads, &c.; the catamenia are deficient, and usually replaced by leucorrhœa; or, *what is too often overlooked*, they are profuse, lasting from six to ten days, consisting of blood instead of the normal secretion, and, in fact, constituting a passive hemorrhage, which is often the cause of the anæmia; the muscular system is very feeble, lassitude and aching pains of the limbs being produced by trifling exertions; the intellectual powers and energies are also greatly impaired; in many patients, there are transitory neuralgic stitches and aches in various parts of the body, and sometimes exquisite sensitiveness of the skin, especially that of the mammæ and abdomen; more or less headache is almost always experienced, generally with vertigo, rushing noises in the ears, and, in severe cases, with intolerance of light and sound, delirium, and even fatal coma, of which I have recently witnessed two instances. Such are the general signs of anæmia, and therefore of anæmic palpitation.

"We proceed to the *physical signs*. The impulse of the heart is less remarkable for force, than for an abrupt, bounding character, with throbbing of the arteries—often universal, and a jerking pulse. Hence, this species of palpitation is more audible to the patient than perhaps any other, the sound appearing to rush through his ears, especially when he lies on his side in bed, and each arterial throb causes a movement of his pillow. Some are so sensible of the universal arterial throb, that they can count the pulse by the mere sensation, particularly as experienced in the back, when resting against a chair.

"When the anæmia is considerable, palpitation occasions a weak, soft bellows-murmur in the aortic orifice, with the first sound; and a corresponding whiff is heard in the carotids, subclavians, brachials and other considerable arteries, especially when slightly compressed with the edge of the stethoscope, though this is not always essential to the production of the phenomenon.

"These murmurs in the heart and arteries occur whenever the action of the organ is excited, and in some patients the slightest causes suffice to produce the excitement; as, for instance, a momentary mental emotion, a change of posture from the recumbent to the erect, a constrained position, a meal, flatus in the stomach,

&c. I have often found the phenomenon to subsist for a few seconds or minutes only ; that is, so long as the exciting cause continued in operation. The patient, if asked whether he is conscious of palpitation, invariably replies in the affirmative ; yet the pulse may not be strong—it may even be small and weak ; but it will always be “jerking.”

“The treatment of anæmic palpitation is simple, certain, and satisfactory. The operation of the exciting cause having been suspended, the never-failing remedies unless there be counteracting complications, are, large doses of any of the stronger preparations of iron, continued for three to six or eight weeks ; with aloetic aperients, to maintain a free, but not relaxed state of the body ; and a large proportion of animal food, especially mutton and beef, lightly dressed, and taken twice a day at an interval of not less than six hours. A dry, bracing air, a change of air, and out-door exercise short of fatigue, are valuable auxiliaries.”

Palpitation from too stimulant diet and from plethora may be recognised by the habits and condition of the patients, and the absence of the physical signs of organic disease. It is effectually treated by bleeding and cathartics. The foregoing conditions are illustrated by some very instructive cases.

Syncope, the subject of the concluding chapter of Part fourth, is too well known to require farther notice.

Part fifth comprises miscellaneous affections, and first *polypus of the heart*. The *physical* signs, given from Laennec, are the supervention suddenly of anomalous, confused and obscure pulsations. The general signs, are those of sudden and excessive obstruction to the circulation through the heart.

The treatment of polypus is mainly preventive. Excessive blood-letting, and the use of sedatives must be guarded against, the diet be limited in quantity and *diluent drinks used but moderately*. By warm applications and diffusible stimuli the action is to be maintained on the surface and congestion thus prevented. The use of potassa and soda has been suggested as having a solvent action on the blood. They require further observation. When connected with inflammation the treatment must be adapted to this condition.

The three succeeding chapters treat respectively of *displacements of the heart*, *hydro-pericardium*, and *pneumo-pericardium*. Auscultation and percussion detect displacements. Hydro-pericardium, when the fluid is equal to eight or ten ounces, presents the following indications:—

“Dulness on percussion is preternaturally extensive, and I have known it mount under the sternum, in a conical form, as high as the second rib; the motions of the heart as perceptible beyond the ordinary limits; the impulse is of an undulatory nature, some beats being stronger than others, and the point at which they are most sensible, varying every moment; the impulse does not accurately coincide with the sound of the ventricular contraction, as the heart has to remove the interposed fluid before it can impinge against the thoracic walls; the first sound is dull and remote, in consequence of the intervention of the fluid: finally, the sensation communicated to the hand and the stethoscope is that of an impulse transmitted through a fluid, and not of an organ striking the ribs *immediately*. When the quantity of fluid is very great and the action of the heart feeble, the impulse, I have found in several instances, may be totally imperceptible: in which case the signs are, the unusually extensive, conical dulness—greater than can be accounted for by hypertrophy, and the dulness and remoteness of the first sound opposite to the apex of the heart.”

The treatment must be the same as for general dropsy. Dr. Hope discourages the idea of tapping.

Pneumo-pericardium, or effusion of air in the pericardium, and which Laennec thinks he has detected during life, Dr. Hope thinks very questionable.

Part sixth, the concluding portion of the work, is a valuable collection of cases illustrative of the principles and conditions which have been established and described,

EPITOME OF
American Medical Journals.

———Like the bee, tolling from every flower
The virtuous sweets, we bring them to the hive.

SHAKESPEARE.

THE NEW ENGLAND QUARTERLY JOURNAL OF MEDICINE AND
SURGERY. No. 2, October, 1842.

ART. 1. *Notes on an hæmia, principally in its connections with the puerperal state and with functional disease of the uterus, with cases.* By W. Channing, M.D.—The cases detailed in this article are quite interesting and seem to demonstrate the existence of some pathological condition, other than the loss of blood producing the condition, which Dr. Channing thinks is improperly called an hæmia. He ventures to suggest, and sustains his suggestion with great plausibility, that this pathological condition is, if not entirely at least in great part, in the subversion of the functions of the capillary system, by which the blood passes from the arteries to the veins, without undergoing its usual changes.—The symptoms of this condition are a brilliant whiteness, smoothness, roundness, dryness and warmth of the *surface*, every where; the blanched lips, mouth, tongue; the scarcity of external or subcutaneous *veins*, and the bright pink color of their contents, with the want of the roundness in these vessels which results from their fullness; various noises in the head; the mind in various states, but generally having a serene anticipation of death. There is tumultuous action of the heart. Dr. Channing, sustained by his cases, infers a close connection between the puerperal state, and this morbid condition, and in such a connection the disease is most fatal. The cause of the disease being

so obscure as it is, the treatment is necessarily undefined and can only answer obvious indications. Dr. Channing suggests as an inquiry, what might be the effect of transfusion?

ART. 2. *Is the report of a case of gun-shot wound of the face and neck, with ligature of the common carotid artery.* By Dr. Twitchell, of Keene, N. H.—The artery was tied October, 1807, eight months before the first published case, that of Sir Astley Cooper, performed June, 1808. Dr. Twitchell alludes to a much earlier case than either of these, that of Mr. Fleming of the British Navy, performed October 17, 1803, and published by Dr. Cosley in 1817. From the profuse bleeding through the wound in the artery, after the application of the ligature, Dr. T. was compelled to use a graduated sponge-compress, and from this evidence of free anastomosis, he infers the inutility and impropriety of tying the carotid for tumors about the head and neck.

ART. 3. *Contributions to the history and diagnosis of Croup.* By John Ware, M.D.—The purport of this paper is to show that the affections usually called croup, present four different classes—the membranous, inflammatory, spasmodic and catarrhal. Dr. Ware's investigations lead him to the following conclusions:—

“1. That the only form of croup attended with any considerable danger to life, is that which is distinguished by the presence of a false membrane in the air passages.

“2. That the existence of this membrane in the air passages is in a very large proportion of instances indicated by the existence of a similar membrane in the visible parts of the throat.

“3. That this affection differs not in stage or degree, but in kind, from all the other cases which are commonly known by the same name, and that the latter have no tendency to become converted into or to terminate in the former.”

The cases presented by Dr. Ware show the membranous to be the only fatal form of croup. In its onset it is less alarming than the milder forms, it is less sudden in its attack, and not marked by such distinct peculiarities either of the respiration, the voice or cough. The sudden character of an attack is rather a favorable indication.

ART. 4. *Is a summary of ten cases of Tubercular Meningitis in the Adult.* By J. B. S. Jackson, M.D.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. 26, No. 26, August 3.

In a paper by Robert Worthington it is suggested that phlegmasia dolens is a neuralgic disease, and as such ought to be treated. He directs equal parts of a saturated tinct. of actea and wine of colchicum, a teaspoonful once an hour until the pain abates, and then every three, four, or six hours as the pain indicates. As the secreting organs, and especially the liver become deranged, he gives five grains of blue mass night and morning until they become healthy. He mentions three cases confirming his views and treatment.

A case of Malformation of the Heart. By A. C. Smith.

A Report from the Boston Orthopædic Infirmary. By B. Brown. Of three operations, in one of which the tendo-achillis, tibialis posticus, tibialis anticus, the extensor longus digitorum pedis, the exterior longus pollicis pedis, were divided and the patient restored with a good foot in less than three months.—The other two were cases of lateral spinal curvature. One of these, a married lady, 25 years of age, mother of two children had the longissimus dorsi divided transversely, on each side of the spinal column, opposite the last dorsal vertebræ, without loss of blood. On the seventh day she walked up two pair of stairs and had her spinal supports raised, by her request, one and a half inch.

Effects of the times on the Profession, is the heading of some remarks showing what every practitioner must feel, that general hard times particularly affect medical men, by giving them more to do, with less compensation; and by repressing publication, diminish new reading, new ideas and original writing.

Vol. 27, No. 1, August 10.

ART. 1. *A case of Destruction of the right Kidney and Bladder—extensive disease of the Lungs. By J. D. Mansfield, M.D.*

ART. 2. *A peculiarly original paper on Gonorrhœa Dormientium. By Charles Knowlton.*—The author suggests that this affection depends rather upon an irritable, than a debilitated condi-

tion of the genital organs ; and that this irritability does not depend solely upon masturbation as the cause. He conjectures that this irritability may arise from disorder of the stomach and liver, and that there is a peculiar affection of the stomach unattended by the usual symptoms of gastric disorder, but which leads to insanity, and perhaps to masturbation, involuntary emissions, nymphomania, satyriasis, &c., and hence why so many cases of mania, are attributed to self-pollution. He thinks the best treatment of nocturnal emissions is marriage ; and for this, anxious, irregular intercourse is no substitute. In cases of hepatic and gastric disorder, he gives with benefit Eberle's bilious pill or calomel or blue mass at night, followed by a laxative in the morning. Local, sedative applications, injections per anum of cold water, and finally a T bandage with an orifice for the protusion of the penis, applied in such a manner that an erection cannot take place, without awaking the patient, are all recommended.

No. 2, August 17.

ART. 1. *A suit for slander brought by a "cancer doctor," against a "regular doctor."*—In which it was proved that the doctor, Dr. March of Albany, had cautioned persons against the plaintiff, Davison, saying that he ought to be indicted for killing a woman. For the defence it was proved that three women and a child had died under Davison's use of an arsenical plaster, with symptoms attributed by the witnesses to the poison of the remedy, and a number of living witnesses testified to its effects upon them. The jury gave a verdict against Dr. March for \$55 with costs.—Not wonderful but worthy of remark is the fact shown in this case, that the legislature of the state in 1819, passed an act for the special benefit of the cancer doctor, authorizing him to collect his fees for ten years, despite the restraining statute upon the subject.

ART. 2. The next original paper is a report made by Dr. Gallup of Woodstock, Vt., of a communication from Dr. Emmons, his former pupil of Hartland, Vt., stating the case of a woman who had one hundred and fifty worms, from three to four inches long extracted from an abscess in her breast, by the repeated ap-

plication of the stomach and bowels taken from a puppy. The application was made in consequence of the woman's husband having seen a similar case, similarly treated in Ireland. The Editor acknowledges the receipt of a phial containing specimens of the worms.

ART. 3. An anonymous paper elicited by that in the previous number on Gonorrhœa Dormientium, giving authorities upon the subject and approving the views of Dr. Knowlton.

No. 4, August 31.

ART. 1. *A Biographical notice of Prof. Draper, N. Y. medical school*, presenting a brilliant example of talent, energy and perseverance winning its appropriate reward.

ART. 2. *Report and analysis of Clarendon Springs, in Rutland county. Vt.* By Levi Aldrich, who believes them to be more sanatory than they are generally thought to be.

ART. 3. *An open and responsible report*, by C. H. Stedman, of a homœopathic physician who prescribed 19 grains of calomel, 30 of opium and 30 of quinine at one dose, and to be repeated!

No. 5, September 7.

ART. 1. *A case of Typhoid Fever, supposed to have been disease of the brain, in a patient 63 years of age.* By Elisha Bartlett, M.D.—Discoloration, thickening and abrasion of Peyers' glands were found. Dr. Bartlett suggests that typhoid fever occurs often in the country than in towns and cities in persons more than forty years old.

No. 6.

ART. 1. *Cases of Luxations of the Knee and Shoulder Joints.* By Amasa Trowbridge, M.D.

ART. 2. *A case of complicated Dropsy.* By A. H. Kelsey, M.D.

ART. 3. *Masturbation*, an anonymous communication, in which the writer asserts the most horrible and degrading prevalence of this vice among all classes of females, even existing among those in connection with the church. He attributes the various neuralgic and hysterical affections of females to its influence. A conclusion which we hope and believe results more from the preju-

dice of a theory than from a just estimate of female refinement, and moral purity.

For the morbid irritability which is produced he recommends the strong tinct. canth. in doses of 10, 15, or 30 drops, three times a day until a change is produced, and an impression continued for several days.

No. 8.

ART. 1. *Remarks, upon the obstacles thrown in the way of young physicians, and the illiberal treatment they too often receive from their elder brethren.*

No. 10.

ART. 1. *Vital Statistics of Negroes and Mulattoes. By a Philanthropist.*—This paper goes to show that the pure African is longer lived than the inhabitant of any other portion of the globe, and that mulattoes are the shortest lived of the human race.

ART. 2. *Report. By William Ingall, Jr., of the bite of a moccasin, in which the patient promptly applied a ligature around the limb below the knee; the bite being in the ankle. The anus of a chicken was applied to the wound, the chicken became of a green color and died in 10 minutes, another died in 20 minutes from the same application. Dr. Ingalls removed the ligature, rubbed the limb with linimentum ammoniæ, and gave five drops of aqua ammon. every five minutes. Well on the fifth day.*

Nos. 11 and 12.

ART. 1. *Reports of Surgical Cases presented at the Albany Medical College, for the Session 1842—3.* Instructive and beneficial to those concerned but not of special interest to others.

ART. 2. *Report of a case of Ulceration of the Cornea, which resulted from a blow on the head that finally caused death.*

AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

New Series, No. 8, October, 1842.

ART. 1. *Osteo-Sarcoma of Lower Jaw—Amputation—Cure.*
By Charles Bell Gibson, M.D., of Baltimore. The tumor was confined to the lower jaw, extending from the front of the first molar tooth, to the front of the corresponding tooth on the opposite side. Upward, it extended nearly to the roof of the mouth, having pushed from their sockets all the incisors, the cuspid, and one of the bicuspid on both sides of the upper jaw, and separating the lips vertically four and a half inches. Below, it extended under the tongue to the anterior border of the sublingual gland, in front of which the surface of the tumor was broken by a rising or lobe, of the size of a black walnut. During the operation for the removal of the diseased mass, when the connections of the digastricus, mylo-hyoideus and genio-hyo-glossus muscles with the jaw were divided, the hemorrhage from the exposed cavity was profuse. The submental and inferior coronary branches of the facial artery were easily secured; but the ranine and sublingual arteries gave considerable trouble, retiring out of sight, and making, from the increasing weakness of the patient, a scarcely perceptible jet. He was removed into the open air; this with wine and water caused his pulse in about twenty minutes to rise, and the bleeding vessels were then secured. From the division of the genio-hyo-glossus muscle, there was considerable inconvenience produced by the disposition of the tongue to turn over and point down the pharynx. To obviate this a ligature was passed through the frænum and secured to an iron-wire contrivance, which consisted of an upright on either side of the head, having a horizontal position on a line with the mouth, and projecting three inches beyond it. A single piece of iron-wire was bent for the purpose. The wound healed well, and the patient was discharged on the fifteenth day after the operation, that he might return to his home in Virginia.

ART. 2. *On Cimicifuga and Iodine in Phthisis Pulmonalis.*
By Chas. C. Hildreth, M.D., of Zanesville, Ohio.—The author

affirms, that in acute phthisis, unaccompanied with much inflammation in the vesicular structure, or in the pulmonary mucous or serous membranes, he has often seen the decoction of the fresh root of the *cimicifuga* promptly overcome the hectic paroxysm, allaying cough, reducing the rapidity and force of the pulse, and inducing gentle perspiration. In those intercurrent congestions, and inflammations, so frequent in the second and third stages of phthisis, from atmospheric exposures, he has often seen it exert the same happy influence. He directs as large a dose as the stomach will bear without inducing vomiting, every two or three hours when the patient is awake; and he makes it the vehicle for whatever other remedies the case may require. Dr. H. has not ventured to give iodine in phthisis, until he has as far as possible removed all signs of inflammation of the lungs or pleura, by antiphlogistic or other means. His plan, then, is to give it with full doses of the *cimicifuga*, that its stimulant influence may not be injuriously felt. Thus used, iodine, in his practice, has almost uniformly improved the appetite and the nutritive function, diminished febrile irritation and cough; and in all respects acted favorably. In numerous instances he has been surprised at the prompt and permanent restoration of patients to health, under its use, from a state, as he believes, of well developed phthisis.

ART. 3. *On Typhoid Pneumonia, as it occurs in the neighborhood of Columbia, S. C.* By R. W. Gibbes, M.D., of Columbia, S. C.—Dr. Gibbes is fully impressed with the conviction that the treatment of disease in plantation negroes must differ much from that in whites. The negro lives a life of constant exercise with exposure to changes of weather; his diet seldom varies; he has a certain amount of labor to practise, and he usually indulges in no excesses. The action of his system is more equable; his nervous power is more regularly distributed, and the various functions of the organs are less apt to be impeded in him than in whites who live more or less irregularly. Negroes suffer more from the diseases of cold weather, and less from those of warm; they are less liable than whites to inflammatory affections; inflammation is not so active, and is much more readily controlled with them. They are more easily brought under the influence of medicine; hence their diseases are more curable.

The disease which is the subject of Dr. G.'s remarks is known by various names, according to the predominance of particular symptoms,—as *cold-plague*, *head-pleurisy*, *typhoid-pneumonia*, and *bilious-pleurisy*. He considers typhoid pneumonia among negroes as an adynamic disease, in which *the nervous energy of the patient is directly debilitated by the sedative influence of cold*. If reaction takes place, the nervous system must be braced, and kept steady, while such means are used to control local inflammation as will not reduce the general strength. The disease is then one of irritation and not of inflammation. The tendency to sink is so great that general depletion is highly injurious, and local bleeding must be practised with great caution. Small doses of calomel as a general excitant of the secretions, with camphor and opium, and, when there is much debility, with carbonate of ammonia, and alcoholic stimuli, concurrently with free vesication, are appropriate remedies. Laxatives, not cathartics, materially aid in the treatment.

ART. 4. *On the use of the unripe fruit of the Diospyros Virginiana, as a Therapeutic Agent.* By John P. Mettauer, M.D., of Virginia.—Several preparations of the unripe fruit of the persimmon are strongly recommended by Dr. M. when astringents are required in cases of cholera infantum, diarrhœa in infants and adults, dysentery acute and chronic, tonsillary affections, uterine hemorrhage and menorrhagia. The preparations are four in number, viz: an infusion, a syrup, a vinous tincture, and an acetous tincture. The first of these is made by infusing from one to two ounces of the fresh immature fruit, slightly crushed, in a common tea-cup of boiling water. The dose for infants is from one to three tea-spoonsful every hour, or after longer intervals; for adults from one to three table-spoonsful. The infusion may be converted into a syrup, by adding to it refined sugar, and gently boiling to a proper consistency. The dose for infants is the same as that of the infusion; for adults from two to four tea-spoonsful. The vinous tincture is made by digesting one pound of the fruit slightly crushed, in one pint and a half of port, or any other wine, exposed daily to the solar heat for fourteen days. This tincture is applicable to the treatment of adult cases of diarrhœa.

The acetous tincture is prepared by digesting two pounds of the fruit slightly crushed, in two pints of strong pure apple-vinegar, for fourteen days, exposed to the solar heat. This is chiefly designed for external use, in the form of gargles and cataplasms.—It is exceedingly useful, Dr. M. says, as a cataplasm in whitlow, or inflammation of the mammæ threatening milk abscess.—To form a cataplasm, convert any quantity of the tincture into a poultice, by uniting with it when hot, any kind of farinaceous material. Dr. M. sometimes adds aromatics to the infusion, as casia-bark, pimento, ginger, &c., or animates it with alcoholic stimulants. He often combines the infusion and the syrup, with the syrups of rhubarb and senna, or the infusion of senna; and occasionally with calomel.

ART. 5. *On Endemic Sore Mouth and Diarrhœa peculiar to Nursing Women.* By Lewis Shanks, M.D., of Memphis, Tennessee.—In the treatment of this malady, when it occurs in the last month of gestation, as it sometimes does, Dr. S. relieves the feverish excitement in the robust and plethoric by bleeding, followed by alteratives and laxatives, such as blue mass, calc. magnesia and rhubarb in small doses; in those of feebler health, in whom there is little or no feverish excitement, he prescribes, as a tonic and alterative laxative, a combination of blue mass, ipecac., carb. of iron, rhubarb and aloes in proportions to suit each case. Ipecac. alone, in doses from one half to two grains, is a good remedy.

During nursing, when the disease becomes chronic and is attended with diarrhœa and emaciation, a course of alteratives and a rigid attention to diet are indispensable. In some bad cases a solution of arsenic and corrosive sublimate, containing of each a sixteenth of a grain for a dose, given two or three times a day, with a diet and drink of soda with barley water, or of wine water and milk, has succeeded better with Dr. S. than any other course he has tried. As a wash for the mouth, the infusion of *sanguinaria canadensis* is recommended by him. Weaning the child is indispensable in grave cases attended with much emaciation and nervous irritation. In a description of this disease as it occurs at Rochester, N. Y., Dr. Backus says, the onset is often sud-

den, and the bowels always constipated; and the most successful treatment is with alteratives and laxatives combined. But at Memphis, Tenn., it comes on gradually, and in its well marked chronic form, which never occurs except during lactation, the constant diarrhœa excludes the use of purgatives or laxatives.— In the same city, and in the level alluvial country near it, constipation is rare either in health or disease.

ART. 6. *On the treatment of Deformities, following unsuccessfully treated Fractures.* By George W. Norris, M.D., one of the Surgeons to the Pennsylvania Hospital. From p. 305 to p. 316. This essay is a valuable contribution to surgical literature. It spreads before the reader in a few pages the views and practice of distinguished surgeons of various countries, concerning the three kinds of means which have been adopted for the removal of deformities following fractures. These means are, first, straightening a crooked limb by means of well applied pressure; secondly, re-fracturing a bone at the point of former injury, to give it a better direction by an after-treatment; and thirdly, making a section of, or removing the projecting or angular portions of bone which give rise to the deformity.

ART. 7. *Two cases of Black Vomit, with Observations.* By Richard D. Arnold, M.D., of Savannah. From p. 316 to p. 321. Dr. Arnold entertains the opinion that the black vomit of yellow fever is a blood, altered by its transition through the capillaries of the stomach, or, as he otherwise speaks of it, a hemorrhagic secretion from the gastric mucous membrane. As far as his experience goes he concludes, that the peculiar distinctive characteristic of yellow fever is a total absence of biliary secretion and excretion.

ART. 8. *Paralysis of the Face, successfully treated with strychnine.* By B. F. Joslin, M.D., of the city of New York.—In one of the cases recorded by Dr. J. he infers that the disease originated neither at the origin nor in the course of the portio dura, but at its organic extremities. The fact on which he bases this conclusion is that the paralysis affected both sides of the face without extending beyond it. The conclusion is strengthened by the circumstance that the patient, who was a printer, had been

holding types in his mouth, when at work as a compositor.— One drachm of a solution containing about three grains of strychnine, to an ounce of alcohol, was applied to each side of the face three times a day, and the absorption assisted by friction. A little twitching of the muscles sometimes occurred 15 or 20 minutes after its application. The muscles completely recovered their power in two, or two and a half months.

Dr. J. has observed a curious coincidence in a case of paralysis of one side of the face and a case of hemiplegia, while under the internal treatment of strychnine, as to the hour of the day and the interval at which transient twitchings followed a dose of the remedy. The interval was thirty-six hours, and the hour of the day 9 o'clock, A. M. He puts the following question, "Can there be any tendency in the action of this agent to recur at nine o'clock in the morning, or after twelve or thirty-six hours after its administration, and is its primary action more manifest in the evening?" Another fact to which he calls the attention of the reader is, that whilst a patient was sitting in his chair, with his arm but slightly flexed, and his leg much more so, the patient noticed that at the instant of the spasmodic action caused by the use of strychnine, the fore-arm always became flexed and the leg extended, the latter more powerfully. It was subsequently ascertained, that whether the action in either limb was flexion or extension depended on its previous position.

ART. 9. *Remarks on the propriety and best manner of breaking and extracting large Calculi in the lateral operation.* By Josiah C. Nott, M.D., of Mobile.—The object of the author is,

1st. To prove, that where the calculus is large, and requires a force in extraction which would bruise and lacerate the soft parts severely, it is safer to crush and extract it piecemeal, provided this can be done without injury to the bladder.

2d. To recommend, as meeting these indications, an instrument of large size, but made after the model of Heurteloup's lithotritry instrument, *brise coque* (stone-breaker).

He gives two cases of successful operation, in which this instrument was used with advantage; one of the operations was performed by himself, the other by Dr. H. S. Levert.

ART. 10. *Aneurism of the Femoral Artery, showing the importance of applying a ligature below, as well as above the sac.* By Wm. E. Horner, M.D., Prof. of Anatomy in the University of Pennsylvania, &c.—This is a narrative of a third example occurring within the space of a year under the observation of one surgeon, “where it was absolutely necessary to apply one ligature above the aneurism and another below it, to arrest the hemorrhage, and this last a case of simple aneurism.” The experience and conclusion of Prof. Horner will no doubt induce other surgeons to reconsider the present rules of treating the disease.

ART. 11. *Plastic Operations.* By J. Pancoast, M.D., Prof. of Anatomy in Jefferson Medical College. From p. 337 to p. 357. This paper classifies the modes of restoring lost parts by plastic operations. Nearly all the *principles*, which have been variously employed in the cure of deformities by plastic surgery, are therein set forth. An operator should be familiar with these principles, though there can exist, in general, no prescriptive plan of treatment. Deformities are so dissimilar in different cases, that every new one becomes a separate subject of study, and opens a fresh field for the exercise of ingenuity in restoring the lost or deformed parts, with the best success and the least injury to the neighboring tissues.

ART. 12. *Treatment of Hemorrhoids.* By Wm. E. Horner, Prof. of Anatomy, &c.—“The plan here recommended, is to calm the rectum by cold water injections for some days before the operation; a precaution, the value of which, I have learned from one of the best and most experienced surgeons we have, my friend Dr. Thomas Harris, of the United States’ Navy. The rectum being empty at the time of operating, the patient by straining in a squatting posture, forces the tumour or tumours out. He then goes to bed, and rests on the side corresponding with the tumour, and near the edge of the bed. A thick sail-needle armed with a large ligature, is then passed transversely through the upper part of the base of the tumour; the needle being removed from the ligature, the two ends of the latter are tied together, so as to form a loop. A stout awl then transfixes the lower part

of the base of the tumour in a line parallel with the ligature above.

“In a large protruded pile, the usual anal pouches or sacs are much enlarged, and have their orifices pointing downwards.— The awl when placed as intended, is between these sacs and the adjoining margin of the anus, and makes the part so firm, that it is more easily operated on subsequently. The inferior third of the base of the tumour is now detached from the anus with a scalpel, the anal sacs, and a corresponding loose fold of skin which commonly exists at the same time with large hemorrhoids, going along with the tumour. Should the tumour recede, the loop above, and the awl below, enable the operator to draw it out. A wire noose is then thrown around the adherent base of the tumour, and drawn perfectly tight, by the aid of a double canula. This noose occupies the previous incision and it may be placed with great accuracy, from the command over the pile derived from the first ligature and the awl.

“The tumour, if very large, may now be punctured so as to disgorge its blood. At the end of five hours, the part is perfectly dead by strangulation, the tumour may then be cut off near the wire noose, say three lines from it, for which act in the process of operating, a pair of scissors will do; but what is still better, Dr. Physick’s tonsil instrument, owing to the accuracy of its line of incision. The wire noose itself may then be taken away, as the vessels are so compressed and deadened, that no blood will pass through them.

“The awl should be removed directly after the wire noose is applied and fixed, but the first loop should be retained for the final act, to wit: the excision of the tumour, as it assists very much. The operation thus completed, an injection of tinct. opii ʒ i. in two ounces of thin starch, puts the patient at ease, and he falls into a tranquil sleep.

“I have now tried this combination of existing plans in several cases, it has the signal advantage of reducing pain and counteracting hemorrhage, and is decidedly the best for large piles that I have seen used.”

ART. 13. *Suggestion as to the Cause of Crepitant Rhonchus.*

By Edson Carr, M.D., of Canandaigua, N. Y.—“I believe M. Beau and Dr. Williams are quite correct in supposing that the bronchial membranes are somewhat dried by the existing inflammatory action, since one of the most manifest changes observed during the early stages of pneumonia, is a suspension of the aqueous exhalation from the bronchial membranes. Now, the suspension of this function necessarily leaves the mucous with which the air-passages are lubricated, in so thick and tenacious a condition, that these membranes are glued together whenever they come in contact. The pulmonary tissue being more or less compressed by the descent of the ribs, and the rising of the diaphragm during every *expiration*, the bronchial membranes are to a greater or less extent forced into direct contact. The capillary congestion and interstitial effusion, which are among the essential elements of pneumonia, must greatly increase the volume of the diseased lung, and consequently augment the compression of the pulmonary tissue, and facilitate the adhesion or gluing together of the bronchial vesicles.

“Now, during every *inspiration*, the air rushing into and distending these vesicles, necessarily overcomes these cohesions.—And would not the separating of these membranes thus glued together by tenacious mucus, naturally produce precisely such sounds as constitute the crepitant rôle of pneumonia? If this view of the phenomena be correct, it is not strange that “distending a piece of lung with air after it has been compressed,” should give rise to a similar rôle.”

ART. 14. *On Creasote in diseases of the Conjunctiva and Cornea.* By Chas. C. Hildreth, M.D., of Zanesville, Ohio.—In all cases of scrofulous ophthalmia, acute or chronic, Dr. H. says he has found creasote a most effective remedy, used conjointly with proper constitutional treatment. The burning or smarting pain from the creasote should not continue more than *five minutes* after its introduction. The ointment containing it, if too strong, must be diluted with simple cerate, or fresh lard perfectly pure. The more chronic the case, the more creasote will be required and borne. Dr. H.’s usual formula is from ten to thirty drops, to one ounce of strong mercurial ointment. Should the application

prove too irritating, bathing the eye with warm milk and water, or introducing a few drops of cold cream into the inner canthus, will afford relief.

ART. 15. *Chronic Enlargement of the Spleen.* By N. S. Davis, M.D., of Binghampton, N. Y.—Dr. D. made an autopsy of a lady aged 47 years, and found the spleen to be 12 inches in length, and 19 in circumference. It weighed eight pounds and ten ounces without the sac which surrounded it. A few days before her death, on examining the abdomen, the tumor was found extending from the diaphragm to the os ilium, and from the left side of the spinal column to the right side of the epigastric region; thence downwards on the right side of the umbilicus, to within one inch of the os ilium of the right side. She was very much emaciated, &c. &c. No cause could be assigned for the commencement of the morbid action in the spleen, which was first observed about four years previous to the patient's death.

ART. 16. *Case of Gelatinous Polypus, cured with Sanguinaria Canadensis after extraction had twice failed.* By Lewis Shanks, M.D., of Memphis, Tennessee.—The fine powder of the sanguinaria was frequently snuffed up the nostril; and the throat was gargled with a strong infusion. The sac broke in less than 24 hours. The remedy was subsequently continued until the whole inner surface of the nostril was made raw. The sac did not fill again.

ART. 17. *Case of Spontaneous Rupture of the Spleen.* By John Neill, M.D.—The autopsy shewed that the abdomen was filled with blood and clots. The spleen was of natural size and shape, its color was darker than usual, and its structure so soft that it could be broken up by two fingers. It could not be determined precisely whether the hemorrhage was from the spleen itself, or from the veins proceeding from it. But the spleen being so very pulpy, Dr. Neill is inclined to believe it was from the organ itself.

ART. 18. *Operation for Artificial Pupil.* By Isaac Hays, M.D., Surgeon to Wells' Hospital.—“Reflecting on the almost constant occurrence of prolapse of the iris in wounds of the cornea with consequent synechia anterior and drawing aside of the

pupil, and that if the pupil were thus drawn towards the lower margin of the cornea by a simple wound of this coat, every thing that could be desired would be attained, and at little risk; I decided to operate in conformity with these views.

“This I accordingly did on the 28th October, 1841, in the presence of my colleagues, Drs. Littell, Fox and Parrish, the house surgeon Mr. S. L. Hollingsworth, and Drs. Pepper, Neill, &c. The patient being laid on his back on a table, the lower lid of his right eye was depressed by Dr. Fox, whilst I raised the upper lid with the two fore-fingers of my left hand, steadying the ball with the third finger. I then with a properly constructed cataract knife incised the cornea near its junction with the sclerótica, commencing a little below the middle and extending so as to divide nearly one-fourth of the circumference of the cornea. The knife was carried steadily and rather quickly forward, to prevent the escape of aqueous humour before the completion of the incision, as its sudden discharge would favour the prolapse of the iris. The moment the incision was completed the knife was withdrawn; at the same instant the aqueous humour was evacuated at a gush, and the lids were allowed to close. The gush was even greater than I had hoped for, so much so, that at first I supposed some pressure must have been made on the eye, which was not, however, the case. After the lapse of a minute or two the lids were separated and the iris found prolapsed so as to draw the lower edge of the pupil quite to the incision. I felt satisfied that the iris would adhere to the cornea at the wound, forming at this point synechia anterior, and determined contrary to the opinion of all present to trust to this taking place. The patient was placed in a dark room, and put upon a restricted diet. The result justified my confidence; adhesion formed, no inflammation occurred, the patient was soon able to bear the light; his vision improved, and a few days since, (Sept. 1,) Kane called to see me and assured me that his vision with that eye was almost as good as ever.”

ART. 19. *Improvement on the Tourniquet.* By *Silon A. Henkel, M.D., of New Market, Va.*

THE MEDICAL EXAMINER.

Vol. 1, Nos. 32, 33, 34 and 35, August, 1842.

Case of Inflammation and Necrosis of the Femur, with Femoral Abscess, terminating fatally on the thirtieth day. By J. F. Meigs, M.D.—After relating the history of this case and its autopsy, Dr. Meigs adds the following paragraph of observations.

The most important object, in a case of this kind, is to determine at once the diagnosis, because of the great importance of the treatment during the early stage. In the early stage of such an attack, it is very apt to be mistaken for rheumatism or neuralgia; nor is it very easy to distinguish it from the former; however the character of the fever, the great rapidity of the pulse, the irregular distribution of heat, the expression of the countenance, which is usually very anxious, the character of the pain, and its situation, and the peculiar decubitus, will in a very few days lead one to the true nature of the illness. It is important to make this distinction, for if such a disease can possibly be arrested in the early stage it should be done; and the only probable chance is a full and free use of all the antiphlogistic measures in the very beginning of the attack. After suppuration has taken place and can be clearly proved, the question arises, shall an opening be made? To this the great weight of authority replies in the affirmative, and I doubt very much whether in a case like the above, where, though fluctuation cannot be felt, every other symptom indicates its presence, a surgeon would not be quite justifiable in making an incision to the bone, and thus, at least, relieving the extreme tension of the part, to which may be ascribed (as is the case in paronychia) the excessive constitutional irritation under which the patient labours. Another very interesting feature in this case is the great rapidity with which the disease advanced, terminating in suppuration, necrosis of the bone, and death in thirty days from the attack.

Nos. 36, 37, 38, 39, September.

On the Mortality after Amputations. By Meredith Clymer, M.D. From p. 561 to p. 565.—In an analysis of Mr. Malgaigne's

essay on the "Mortality after Amputations," recently published in the Examiner, Dr. Clymer proposed to compare the results in Mr. M.'s cases, with the results at different periods and in various places reported by others. In the present article he proceeds to redeem this pledge and gives a large number of interesting facts.

Ulceration and Calcareous Concretion at Aortic Valves—Dilatation of Mitral—Hypertrophy—Disease of Kidneys—Arachnitis. The progress of the case after the admission of the patient, who was a German, æt. 33, into Blockley Hospital, and the autopsy are reported by Dr. Ludlow, resident physician. Dr. Gerhard's comments are as follows :—

At the time of the entrance of the patient he was obviously labouring under advanced disease of the kidneys; his urine was highly albuminous, and the complexion was of the peculiar tint usually found in renal dropsy. The patient was dull of intelligence, and spoke only a half intelligible German patois, so that it was impossible to obtain even a tolerable history of the case; and there were no means of knowing whether the disease of the heart or kidneys had first occurred. The cardiac affection, at the time of his entrance, was apparently limited to the patescence of the mitral valve, and roughening and thickening of the semilunar. The ulceration and morbid concretion were more recent changes and I have no doubt originated with the attack of fever, which was referred to aortitis, partly from the character of the pulse, but much more from the great increase in the morbid sounds of the heart, especially the second sound, which was rendered extremely harsh, from the regurgitation of the blood at the orifice of the aorta, and its meeting with the rough and projecting mass.

Not the least interesting fact in the case, was the latent arachnitis. This is not very unusual in cases of extensive lesion of the kidneys; the functional disorder, which is the usual termination of such cases, gradually passes into inflammation. The inflammation at the orifice of the aorta was probably owing to the same cause—the cachexia produced by the renal disease. Dr. Chevers, in a recent number of Guy's Hospital reports, lays great stress upon this form of aortitis, and the peculiar condition of the body in which it occurs. The termination of inflammation

of this character is almost necessarily fatal, and is, of course, beyond the reach of the ordinary modes of treatment. Erysipelas accompanied the earliest symptoms of the inflammation, confirming the analogy pointed out by Dr. Chevers, between erysipelas and the asthenic forms of aortitis.

Case of Resection of the Elbow-Joint. By Thomas Harris, M.D., Surgeon U. S. N. Reported with Remarks by Meredith Clymer, M.D.—After reporting the case Dr. C. adds,

The above case is published from notes taken at the time.—Seven years have now elapsed, and when last seen, a year since, the woman was doing very well. The wound had not re-opened; considerable motion was preserved, enough, indeed, to enable the patient to use her hand for all ordinary purposes. It is proper to state that for some months prior to the operation, and at the time it was performed, the woman was labouring under severe constitutional symptoms and hectic fever. These disappeared in the progress of the cure. This is the first time the operation was performed in this country. In January, 1841, Dr. GURDON BUCK, one of the surgeons of the New York Hospital, operated for the second time. The final result of Dr. Buck's operation was not made known, to our knowledge. It has recently been performed by our friend Dr. PANCOAST, the Professor of Anatomy in the Jefferson Medical College. We lately mentioned a case which came under our notice in Paris a year since, where fourteen years subsequent to the operation motion was nearly perfect. Messrs. Mannoury and Thore, late internes of Mr. Roux in the Hôtel Dieu, mention a case seen two years after the operation, where "motion was entirely re-established:" and Mr. Robert exhibited on the 5th of last June, to the Academy of Medicine at Paris, a woman in whom he had excised the elbow-joint two years and a quarter previously, and where there was recovery of motion. Since August, 1840, Mr. Roux has replaced the incision in H for the one in T, a modification which he thinks facilitates the after treatment; prevents motion of the limb in the dressing, and hastens subsequent re-union. Mr. Liston adopts also this method. Since 1812, Mr. Roux has performed this operation 18 times, and with 5 deaths only.

Case of Enormously Enlarged Stomach. By John Fondey, M.D. Communicated through Professor Horner.—The patient was a man, æt. about 23. The post mortem dimensions of the stomach, which has been deposited in the Museum of the University of Pennsylvania, are said to be without a parallel.

The amount of food consumed by the man at a meal was very large. He would eat at one meal at least two gallons of mush and milk, and other things in proportion. Sixteen large cups of coffee, were about the smallest quantity of this beverage taken by him. Usually this large amount of food was thrown off by his stomach, though sometimes it was retained. He would eat several meals a day, four or five in number, all of them as large as the above in quantity.

Case of Excision of the Elbow-Joint. By J. Pancoast, M.D., Professor of Anatomy in Jefferson Medical College.—"In this case," says Dr. P., "I departed, from the usual method of after treatment. No poultices or warm applications were at any time made about the joint. The plan of Mr. Syme, to open the wound on the second day after the operation, to sponge out the clotted blood and of course provoke abundant suppuration, I most carefully abstained from, as I was desirous of producing the union of so extensive a wound, in a constitution which had been so much impaired, as far as possible by first intention. By the perfect rest of the part, the length of the interval between the operation and the second dressing, and especially by the use of the lead water and laudanum mixture, this desired result was attained to a greater extent than I am aware has ever attended an operation of the sort. The composition of the mixture I employ is, Ex. Saturni, ʒ ss.; Tr. Thebaicæ, ʒ ij. to a pint and a half of water. I have found this so useful after great operations in checking pain, preventing inflammation, and disposing to union by first intention, and, as I am well assured, occasionally to the organization of the fibrine of layers of effused blood, that I feel desirous of attracting to the practice the notice of the profession. Under its influence, I have had in one case the flap from the forehead, in rhinoplasty, to unite completely, by first intention, to the margins

of the nostril. In the present case the articular heads of the bones only were removed, and there was, therefore, necessarily, far less danger of having the vacillating unsteady fibro-ligamentous joint apt to follow where a large portion of the bones were removed, than a somewhat rigid but rectangular joint—a lesser evil of the two. In many cases reported, I am disposed to believe an unnecessary amount of bone has been removed; and, at least, by practising the operation at an earlier period than has been usually done, all the diseased synovial tissue, cartilage, and articular faces of the bones might be removed without the necessity, as in the above case, of going on the one hand above the epicondyles, or on the other, so low as to take away the place of insertion of the brachialis anticus on the root of the coronoid process and the ulna adjoining it; leaving, in consequence, a much better opportunity for the preservation of a useful limb.”

Cases of Foreign Bodies removed from the Ear and Esophagus.[?]
By James Bolton, M.D. Communicated through Professor Dunglison.—Dr. Bolton reports that on syringing the ear of a girl about 13 years old, half of a coffee-grain, which had been in the ear seven years, was forced out. He also reports that a young lady coughed slightly and hawked into her mouth a small green glass ear-drop, which, seventeen years previously, she complained of having swallowed.

THE AMERICAN JOURNAL OF PHARMACY.

New Series, Vol. 8, No. 2, July, 1842.

Pharmaceutical Notices, by Augustine Duhamel.

Turlington's Balsam.—In the preparation of this compound, which is merely a modification of the Tr. Benzoin. comp., the advantages of the employment of the displacement process are detailed. It enables the pharmacist to prepare it in a few hours as effectually as by a maceration of several months.

Oxide of Silver.—The following process is recommended in the preparation of this substance for medical purposes:—

℞. Crystallized Nitrate of Silver,	℥ j.
Caustic Potassa,	℥ vij.
Pure Water,	℥ xvij.

Dissolve the nitrate of silver in two or three ounces of the water, and then, separately, the pure potassa in the remainder of the water; mix the two solutions, stir with a glass rod, and throw the whole upon a filter: finally, wash the precipitate from any adhering alkali and dry carefully.

Lozenges of Proto-Carbonate of Iron.—An ingenious formula is given for their preparation, ensuring a certainty of the effects to be derived from Vallet's mass, with the grateful flavour of chocolate and sugar, and in the enticing form of a lozenge. It is as follows:—

Take of Vallet's Ferruginous Mass,	15 drs.
Prepared Cocoa,	2 oz.
Powdered Gum Tragacanth,	4 drs.
Refined Sugar,	6 oz.
Tincture of Vanilla,	1 dr.

Reduce the cocoa to fine powder with the sugar, then add the other ingredients, and make into a mass with water; lastly, divide into 360 troches, (each about 14 grs. in weight.) This will allow $2\frac{1}{2}$ grs. of the proto-carbonate to each lozenge—six of which, taken each day, constitute a dose.

Liniment of Hydriodate of Potassa.—In the employment of this iodide in the form of an ointment, a serious inconvenience always results, by the change which it undergoes in a short time, from the re-action of the potassa and the acid of the lard; causing the ointment to become yellow from the evolution of the iodine. The following formula is given from the *Journal de Pharmacie et Chemie*, substituting a solid liniment designated *Baumé Hydriodate*, which possesses the advantage of permanency without risk of decomposition.

Iodide of Potassium,	℥ j.	Soap of Animal Oil,	℥ jss.
Alcohol of 20°,	℥ iv.	Alcohol of 20°,	℥ iv.

Make these solutions separately—that of the soap upon a sand bath, assisted by a mild heat; then mix the two together, aromatize with a small quantity of oil of lavender, and before it congeals, pour it into wide mouth vials.

Easy method of distinguishing Antimony from Arsenic by Ammoniacal Nitrate of Silver. From the *Brit. Phil. Mag.*—In con-

sequence of the numerous conflicting opinions of the most eminent toxicologists, as to the respective merits of the different reagents in the detection of arsenious acid; and particularly the liability to confound this poisonous agent with other metallic preparations, we subjoin the following directions from Mr. Marsh, whose name is already familiar to the chemist.

Moisten a piece of glass, porcelain or mica with the solution of the salt of silver, and present horizontally the wet part to the jet of inflamed hydrogen, holding it about half an inch above the flame. If there is any arsenic in the mixture, the citron-yellow colour so characteristic of this metal is immediately produced.— If there be antimony, a curdled white precipitate is produced.— Again, if neither of these metals exists in the mixture under examination the silver is immediately reduced by the hydrogen to the state of metal.

Remarks on some Pharmaceutical preparations of Lobelia Inflata. By W. Procter, Jr.—From the liability of the active principle of this plant, in a free state, to be decomposed by heat, and the protection afforded to it in this respect by combination with an acid, the following formulæ are given for its various preparations:—

Acetous extract of Lobelia Inflata.

Take of Lobelia seed, bruised, eight ounces.

Diluted Alcohol, four pints.

Acetic Acid, one fluid ounce.

Macerate the bruised seed in the diluted alcohol, to which the acetic acid has been previously added, for forty-eight hours, and then throw the whole on a displacement filter, and after the liquid has ceased to pass, add sufficient diluted alcohol that four pints of tincture shall be obtained. Evaporate this by a water-bath, until it attains the consistence of an extract.

Vinegar of Lobelia Inflata.

Take of Lobelia, in powder, four ounces.

Diluted Acetic Acid, a pint and a half.

Macerate the Lobelia in the dilute acid, for twelve hours, and subject it to displacement on a proper filter, until twenty-four fluid ounces are obtained.

Syrup of Lobelia Inflata.

Take of Vinegar of Lobelia, six fluid ounces.

Sugar, twelve ounces.

Dissolve the sugar in the vinegar, by the aid of heat, remove the scum which rises, and strain.

Citrine Ointment, by Peter Lehman.—We extract the following process, as highly recommended for the consistence which the ointment preserves when thus prepared. “Obtain from any dairy farmer, one pound of unsalted butter; put it in an open stone-ware pot or jar, where there will be sufficient heat to soften the butter, so as to be stirred with a wooden spatula; to a portion of this add ʒ iv. of camphor, in powder, then stir the whole together.

“Dissolve ʒ ij. of quicksilver in ʒ ij. of pure nitric acid, and as soon as dissolved, stir it in gradually. It first assumes a whitish appearance; then, in a short time, an orange reddish, and lastly a fine gold color.”

New method to determine the amount of Nitrogen in Organic Compounds, by M.M. Varentrapp and Will. From the Journal de Pharm. et de Chim.—The method adopted may be said to be original. It is based on the manner in which organic bodies containing introgen, react with the hydrates of the alkalies at a high temperature; and consists in the determination of the *weight* of the nitrogen, under the form of ammonia, that is from the hydrochlorate of ammonia and platinum, or from the metallic platinum. The experiments and arguments adduced, will afford to the chemical analyst an improvement in the determination of the amount of introgen in organic compounds. The previous researches of Dumas, Wohler and Rose have furnished Varentrapp and Will with a foundation for their investigations, but all the processes hitherto employed will undoubtedly be replaced by theirs.

A modification of Marsh's Apparatus. From the Lond. Pharm. Journ. and Trans. By Mr. Morton, of the Veterinary College, London.—This apparatus is similar in construction to Dobereiner's hydro-platinum apparatus for obtaining instantaneous light, consisting of an external cylindrical glass jar open at the top, and

an internal conical receiver, in which the gas is collected and discharged at will through a stop-cock. Two coils of platinum wire are inserted in the base of the outer cylinder, the one under the centre of the receiver, the other external to it. The former being connected with the negative electrode of a galvanic battery, and the latter with the positive, the water contained in the instrument is decomposed, hydrogen being collected in the receiver and oxygen outside. If any arsenic be present in the liquor, arseniuretted hydrogen will of course be formed and may be detected in the usual way.

By this apparatus the use of sulphuric acid and zinc are avoided, both of which may be contaminated with arsenic, and its delicacy in the detection of arsenic is so great as to indicate the presence of one grain in a gallon of water.

THE NEW YORK LANCET.

Vol. 2, Nos. 6, 7, 8, 9, for August, 1842.

These numbers contain a series of articles by Samuel Forry, M.D., on the question, "*Do the various races of man constitute a single species?*"

Diagnosis of Phthisis Pulmonalis. By Archibald Hall, M.D. The object of this paper with its cases is to illustrate the position, that there are instances of incipient phthisis pulmonalis which cannot be clearly diagnosticated by the existence of bronchial respiration, bronchophony, and dulness on percussion, or by the character of the murmur of inspiration, but which may be by the character of the murmur of expiration. In these obscure cases Dr. Hall affirms, that while the murmur of inspiration is normal, that of expiration is attended with a ronchus varying from a simple roughness, to a pressing, or subcrepitant or mucous. He adds, that every case, in which the normal inspiratory, and the subcrepitant expiratory murmur have been detected in his practice, has proved fatal.

Successful Treatment of an Extensive Gun-Shot Wound. By W. Magee, of Patterson, N. J.—The young man who is the sub-

ject of this narrative, was severely wounded in his arm by the accidental discharge of his own gun. The load, which was chiefly composed of pieces of cut lead, entered between the artery and the inner belly of the triceps-muscle, shattering and splintering the humerus in its course. It passed out near the insertion of the deltoid, a portion of which with its insertion was destroyed. The patient positively refused to have the arm amputated; and thus gave occasion for a history of his experience to serve as an illustration of the sufferings and dangers to which a perverse temper may expose a man; and, at the same time, as an example of the salvation of an important member of the body, under a very unpropitious prognosis, by a judicious treatment.

Case of Poisoning by Arsenic. By Charles C. Hildreth, M.D., of Zanesville, Ohio.—A mulatto, æt. 23, swallowed nearly an ounce of arsenic and then drank plentifully of water. He then ate a little supper and soon afterwards began to vomit. On the fourth attempt he threw up what was supposed to be arsenic in substance, mixed with part of the contents of the stomach. A physician, who was first in attendance, had directed a combination of milk, flour and egg-albumen. When Dr. Hildreth arrived, a messenger was sent for the hydrated peroxide of iron, or if that could not instantly be had, the sesquioxide, or precipitated carbonate of iron. The latter was received, six ounces of which were taken between 8 P. M. and 2 A. M., in doses of half a table spoonful every fifteen minutes combined with milk, flour, and albumen. The vomiting continued at short intervals so that there was, in Dr. H.'s opinion, no demand for the stomach-pump.—After the administration of the iron, as soon as the stomach would retain it a dose of castor oil was directed. The next day the patient was bled to syncope, the cold dash was frequently applied to the head, followed by ice, and a blister was placed on the nucha. Ice and mucilage of elm were given liberally to allay the burning sensations in the stomach and the intense thirst. The castor oil operated frequently, expelling a quantity of the iron unchanged in its appearance. On the third day the patient was better; on the fourth his urgent thirst left him, together with the signs of acute inflammation in the affected organs. On the fifth

day he was decidedly convalescent. The case is reported to illustrate the powers of the precipitated carbonate of iron as an antidote. Its efficacy, Dr. H. thinks, is owing to the hydrated sesquioxide which it is found to contain. But its virtues as an antidote are much less than those of the recently prepared hydrated peroxide.

Nos. 10, 11, 12, 13, September.

Sanative Influence of Malaria in Pulmonary Diseases. By Horace Green, M.D.—It has been established by incontrovertible facts, that there are many localities in our country where marsh exhalations abound which are entirely exempt from pulmonary consumption; while at the same time, in places bordering upon these, and similarly situated in all respects, except the absence of the paludal poison, consumption abounds among the inhabitants to an increased extent. Cases have, likewise, been submitted where individuals laboring under incipient phthisis, have been restored to health by removing from these consumptive regions to malarial districts; and, until these phenomena are in some way accounted for, it will not be so easy a matter to ‘demonstrate the fallacy of this opinion.’

Rupture of Pleura Pulmonalis in Tubercular Consumption.—By William Grey, M.D., of Lowell, Mass.—On exploring the chest of a man, æt. 25, who was in the last stage of consumption, two days before his death, Dr. G. found it distended, presenting a contrast with its contracted state two days previously. The intercostal muscles were pushed out even with the ribs and the abdominal muscles were also very tense. On percussion the lower parts of the chest gave a very empty sound, not much unlike that elicited by striking an empty bladder. The upper portion of the chest sounded uncommonly flat, which two days before was very resonant at certain points. When the ear was applied to the chest, the respiratory murmur could be heard only feebly at the upper portion. At the left side was occasionally heard a noise resembling a suppressed whistle. On opening the chest, after death, the left cavity was found completely distended with air, which had not the least disagreeable odor. About a gill of serum was found in the cavity. The left lung was pressed into less than

a third part the space which it naturally occupied, in the upper part of the cavity, and the right lung was very much flattened, both of them containing many tubercles and excavations. A very critical ocular examination was made for the supposed rupture, but without effect. The chest was then filled with water and the lungs inflated by the mouth, when bubbles of air were seen passing from the rupture to the surface of the water. The opening was situated in the fissure between the lobes of the left lung. It was large enough to admit a small probe. It appeared to extend about a line through partially disorganized pulmonary substance, and opened into an uncommonly large tubercular excavation.

An Animal slightly resembling a Mouse discharged from the bowels of a boy five years old. By John B. Newman.—Mr. Newman describes this animal thus,—“slightly resembling a mouse, long snout, short body, and long, thin, veal colored legs, and large hairs round the lips.”

THE AMERICAN MEDICAL INTELLIGENCER.

No. 11, May, 1842.

On the Eclectic Treatment of Delirium Tremens. By the Editor, [Prof. Dunglison.]—The course pursued by Dr. D., in the treatment of delirium tremens has been entirely eclectic, in many cases expectant, and the results have been such as to satisfy him. Under the view which he entertains of the nature of the affection,—that the irregularity of nervous action is usually induced by the withdrawal of an accustomed stimulus, and that the recuperative powers are, generally, entirely sufficient to bring about the necessary equalisation, he has treated the mass of the cases which have fallen under his care without either excitants proper, or opiates. In the first instance, an emetic is given at times, if the patient is seen whilst labouring under the effects of a debauch, or any particular reason exists for its administration; and afterwards a state of tranquillity in the chamber is enjoined—the in-

trusion of too much light and noise being prevented; and, where the stomach will retain it, gently nutritious and easily digestible diet is prescribed; the bowels being kept open by gentle cathartics: and this has comprised the essential part of the treatment. In time, the hallucinations have disappeared, sleep has returned, and entire restoration supervened.

The preceding remarks are a proper prelude to the statistical account of the Women's Lunatic Asylum, at the Philadelphia Hospital, for the years 1840 and 1841, which is under Dr. D's. charge during the six months commencing on the first of November, and ending on the first of May; and under that of Dr. Pennock for the other half of the year. It may be proper to add, that since November 1, 1841, to the present time, (May 1,) not a drop of alcoholic liquor has been used in the treatment of delirium tremens in the Women's Asylum, although some severe cases in the third stage have occurred, which, notwithstanding, terminated most satisfactorily.

Patients admitted into the Women's Lunatic Asylum of the Philadelphia Hospital.

YEAR 1840.

	Cases admitted.	Cured.	Died.
Intoxication, - - -	25	—	—
Delirium tremens, first stage,	34	34	—
do. second stage,	10	10	—
do. third stage,	4	3	1

The fatal case was not seen by Dr. D. The patient died on the morning after her admission into the hospital, and had been treated in the city for nearly a week previously.

YEAR 1841.

	Cases admitted.	Cured.	Died.
Intoxication, - - -	19	19	—
Delirium tremens, first stage	21	21	—
do. second stage,	9	9	—
do. third stage,	6	6	—

Account of the Post Mortem Examination of a Case of Deafness, in which were found an abnormal state of the Ossicula Auditûs, with other irregularities in one Ear, and Destruction of the

Membrana Tympani and Disorganisation of the soft parts of the Tympanum, &c. in the other. By Joshua I. Cohen, M.D., of Baltimore.—This paper, which was read before the American Philosophical Society, at a recent meeting, is a valuable contribution to auricular pathology. The competency of Dr. Cohen as an investigator in this department is so well known to the profession of the city in which he resides, that we may hope he will further adorn the same branch, by adding to it other facts and remarks as instructive as those contained in the present paper. The description of the ears in the case which this records is as follows :—

Eustachian Tubes.—These were found in nearly the same state on each side: their guttural orifices were unusually large. The cartilages around them were much developed, particularly that of the right tube. The tubes themselves were unobstructed in their whole extent, and their diameters even larger than common.

Right Ear.—The external ear and meatus presented the usual appearance—the latter having been sawed off so as to expose the membrana tympani; this membrane, instead of the uniform, clear, semi-transparent and glistening character usually observed, with its concavity only towards the middle, was of a dull and dark appearance, irregular, and evidently thickened; the concavity extending from the circumference, saucer-like: the whole membrane being drawn inwards.

The bone was now cut through so as to show the cavity of the tympanum. This was found to be very much narrowed by the approximation of the membrana tympani to the opposite walls; and, instead of a clear, empty space for the ossicles, &c. the tympanum was filled with inuco-fibrous membranes passing from the membrana tympani to the posterior wall, presenting a cellular structure.

Perceiving some irregularity in the ossicula, I carefully divided these membranes, in order to get a distinct view of the bones *in situ*: when the *tensor tympani muscle* was exposed, I found that the membrana tympani with its ring of bone was only bound down in its place by this connection; the chain of bones being incomplete. Before separating this bond of union, I noted the

unusual shortness of the tendon of the muscle of the malleus, and that it was attached to the handle of this bone throughout its whole length, thus drawing down the bone, and with it the membrana tympani to within a line of the cochleariform process.—This tendon having been divided, and the membrana tympani with its ring of bone separated, the following abnormal state of the bones was seen:—

Ossicula Auditûs.—The *malleus* was normal, but its relation to its proper muscle irregular, as above described.

Incus.—This bone was undeveloped. Its size and form will be better understood by a reference to the accompanying drawing. It has a small articulating surface, by which it is closely attached to the corresponding surface of the malleus—from this a very short process extends backwards towards the mastoid cells, not reaching, however, beyond the circumference of the membrana tympani, to which it was attached closely by a thick fold of membrane reflected from the latter. This constituted the whole bone.

Stapes.—The stapes was wanting, with the exception of the *base*—this was nicely adapted to the size of the fenestra ovalis, leaving, as is usual, a small space all around for the circular ligament, by which it was retained in place.

Upon the tympanic side of this *basis*, and almost filling up the *fossa*, there was a quantity of membranous substance, which connected itself with the cellular structure already described. The *fenestra rotunda* was covered by the same.

Muscles.—The muscle of the malleus (*tensor tympani*) was strongly developed: its tendon was short and very thick, and its attachment peculiar, as above mentioned. The muscle of the stapes (*stapedius*) existed, but there was no tendon at the small orifice at the summit of the pyramid. Thus, in regard to both these muscles, the development seemed in accordance with the function required of them. In the one case, as no stapes existed, the *stapedius* was only partially developed. In the other, the tensor tympani had alone to keep the membrana tympani in place, and it seemed to do so by its short thick tendon.

The other parts of the organ appeared to be in a normal state.

Left Ear.—External ear and meatus were healthy. On cut-

ting away the meatus, the membrana tympani was found to have been entirely destroyed, with the exception of a very thin slip at the anterior inferior edge. The tympanum was thus fully exposed: it contained a quantity of yellowish, fetid matter, and its lining membrane was completely disorganised.

Ossicula.—The *malleus*, though its *handle* was depressed, was still attached to the *incus*; but the union was slight, the ligamentous and muco-fibrous connections being involved in the general disorganisation.

The *incus* was in place: its long *crus* extended to the stapes, but it merely rested upon the latter, the bond of union being broken up, and the least motion separating the bones.

The *stapes* seemed to stand merely in its *fossa* over the fenestra ovalis; it was not bound down by its appropriate band, being easily moved from its position. The ligament (*ligamentum annulare bas. stap.*) forming the important connection between its base and the surrounding bone was entirely destroyed.

The tendon of the *tensor tympani* was disorganised, and that of the *stapedius* destroyed.

The whole condition of the tympanum showed a recent active suppuration, which did not confine itself to this part: the vestibule was penetrated, as well as the mastoid cells; the latter were covered with pus.

The cochlea and one of the semicircular canals were examined a day or two subsequently—but there was nothing remarkable about them, at this time, worthy of note.

THE WESTERN JOURNAL.

Vol. 6, No. 2, August.

This number contains the conclusion of Dr. Pope's translation of Peyraud's History of the Improvements, which practical medicine has derived from Auscultation. As published in the journal, the whole translation occupies 120 pages of two numbers.—The work deserves the attention of all who are beginning to avail themselves of the modern modes of exploring the chest and other

parts of the body with the stethoscope; since it is probable, that it will stimulate them to seek with zeal a knowledge of the means of investigating many phenomena, utterly unknown and useless to those who from prejudice or ignorance undervalue and neglect the principles of auscultation.

No. 3, September.

Facts and Conjectures on the Trembles and Milk-sickness. By Dr. G. B. Taylor, of Morganfield, Ky., with Remarks by Dr. W. L. Sutton, of Georgetown, Ky.—Dr. Taylor is satisfied from such inquiries as he has made to ascertain the cause of the milk-sickness, that the disease is produced by the use of water containing mineral poisons. Dr. Sutton says, that there are a thousand notions on the subject; and he cannot say that he is satisfied *there is any such specific disease.*

Wound of the Antrum of Highmore, with destruction of the eye; fragment of knife-blade removed from the antrum two years afterwards. By W. H. Donne, M.D., Reported by R. S. Wendel. A German, æt. 42, was struck with a dirk-knife an inch above the right superciliary arch. It passed through the eye-lid downwards and backwards, evacuating the humors of the eye, and penetrated the antrum. The wound healed in the space of three weeks. Two years and three months after receiving the injury, Mr. Schuti requested Dr. Donne to examine his mouth. On looking into the mouth Dr. D. saw a small black speck about one-half inch from the interval between the first and second molar teeth. He dissected around it with a bistoury down to the palate process of the superior maxillary bone. He then took a firm hold of it with a pair of curved tooth-forceps and removed it. It proved to be a fragment of the blade of the knife with which Schuti had been wounded. It was $1\frac{1}{4}$ inches long, and $\frac{3}{4}$ in. wide at the widest part. The extraction was not effected without considerable violence, and was attended with extreme suffering.

THE WESTERN LANCET.

Vol. 1, No. 4, August.

ART. 1. *Case of Excision of the Upper Maxillary Bone.* By R. D. Mussey M.D., Professor of Surgery in the Medical College of Ohio, &c.—This operation was performed on Thomas McGillingham, a locksmith, æt. 22. The whole of the left upper maxillary bone, except the point of its nasal process, which was left on account of the lachrymal sac, was removed, together with a part of the molar, and the whole of the palate plate of the palate-bone. The tumor occupied the cavity of the antrum, had pushed through its anterior wall, and attenuated its flooring, filled up the whole nasal avenue, pressed the septum some way into the right nostril, and crowded itself into the cells of the sphenoid bone, and, if Dr. M. judged correctly, filled up the whole cavity of the body of that bone. From this situation it was dug out with the point of his finger. No severe pain nor considerable constitutional irritation followed the operation, and on the *tenth day* the patient took a walk in the street. The tumor was firm and somewhat fibrous in some parts, and encephaloid in others. From its soft and homogeneous texture, Dr. M. entertained fears that it might return, and enjoined it upon the patient to live without flesh, fish, or greasy food, with no condiment except salt, and to drink nothing but water; a course which he has rigidly followed. He has enjoyed fine health, without a trace of the disease, since the operation, a period of *two years and nine months*.

ART. 2. *An Obscure Affection of the Heart, with the Formation of Extensive Membranes within the Ventricles.* By John M. Duke, M.D., of Maysville, Ky. From p. 147 to p. 152.

No. 5, September.

ART. 1. *Thoughts on Epidemics.* By Thos. D. Mitchill, M.D., Prof. of Materia Medica and Therapeutics, in Transylvania University. From p. 193 to p. 202.—We concur with Dr. M. in the opinion, that one of two things is certain, in regard to the sources of epidemics, which are conceded to depend on atmospherical

causes ; either our boasted facilities for investigation are wholly futile and inefficient, or the secret must remain a secret, until a new race of men shall arise, imbued with a new philosophy, that shall give them powers for research to which all their predecessors were strangers. His main design is to call the attention of practitioners to the subject. It is seldom brought to view in our medical journals.

ART. 2. *Two Cases of Eclampsia Parturientium.* By Thos. A. Tellkamp, M.D., of Cincinnati, Ohio. From p. 203 to p. 210.—Dr. T. very judiciously suggests, that an acquaintance with this disease may often be found of high importance in its bearing on medical jurisprudence. The aberration of mind, which takes place in this disease at child-birth, is of that nature, that an ordinary observer might not detect it ; but the physician can see that the patient is acting in a total unconsciousness of the nature and effects of her acts. Many of the tragical cases, of which we hear and read, Dr. T. thinks, take place in this condition of parturient mania, when no witness is at hand competent to observe and decide on the mother's state of mind.

No. 6, October.

ART. 1. *The Curative Influence of Mercury in Fever.* By L. M. Lawson, M.D. From p. 241, to p. 250.—This essay was read before the Hamilton County Medical Club, Ohio. Appended to it, are remarks made after the reading of the paper, by Dr. Harrison and Dr. Carroll. Dr. Lawson alledges, that during fever, when the secretory organs are deranged, 1st by the action of the remote cause on the nervous system, and, 2ndly, by the consequent vascular excitement, the depurative secreting organs fail to separate refuse material, the venous blood assumes a darker hue, and the system suffers from an accumulation of that material. The liver is one of the principal organs concerned in this derangement ; and it is owing to the state of the liver that mercurials are necessary. Calomel stimulates the liver, arouses it, excites its absorbents, and thereby causes a removal of vitiated material from the circulation. So far as this effect takes places, as manifested in the dark alvine evacuations, so far will be the re-

lief to the general system. The use of calomel, then, Dr. Lawson concludes, is necessary and indispensable in the treatment of fevers. He wisely adds, however, that as much injury is to be apprehended from a protracted and copious use of it, as from its entire proscription.

Dr. Harrison appears to belong to the ultra-mercurial school, and three comprehensive lines prove that the company he keeps is very respectable.

"In yellow fever Chisholm first employed it, with a bold hand. Rush confided in its vast powers. Johnson, Annesly, Swining, [?] and other late writers on that tropical fever, have most emphatically commended its vast curative agency."

He is aware that a patient in bilious fever may die from excessive mercurialism after the fever is subdued, but he has never seen a patient who was fairly salivated, perish of the *disease*.—That mercury is not a stimulant, he thinks, is manifested by several interesting and important facts in practical medicine.

Dr. Carroll suggests that Dr. H., in declaring that mercury is not a stimulant, evinces that he has never been salivated. Dr. C. has seldom, if ever, observed calomel, or any other mercurial, useful in scarlatina. Although alterative doses may be sometimes useful at the close of the disease, he deprecates the profuse exhibition of mercurials as advocated by Armstrong.

ART. 2. *Case of Congestive Fever accompanied with extreme torpor or insensibility of the nerves of sensation. By David Hutchison, M.D., of Putnam County, Indiana.*—This form of disease is very common in the miasmatic districts of the State of Indiana during the autumnal months. Sometimes the congestions are paroxysmal, and the only successful mode of treatment is, to anticipate the paroxysms by tonics and stimulants, and by alteratives to correct the functional derangements of the hepatic system.

ART. 3. *Inflammation of the Right Ovary and Bowels, caused by an extraneous substance. By J. F. Fleming, of Elizaville, Ky.* The death of this patient, who was a negro woman, aged 26 years, took place nearly three months and a half after the first occasion on which the advice of Dr. F. was requested. At the autopsy, an ordinary brass pin was found in the right ovary, and this organ was a completely disorganized mass.

ART. 6. *Removal of a large Pulsating Tumor from the Arm, with division, and re-union of the Ulnar Nerve.* By Thomas H. Roe, M.D., of Newark, Ohio.—A lady, about 45 years old, had been afflicted with this tumor on the right arm for fifteen years. It arose from the inner edge of the biceps flexor, and the brachialis internus, commencing in the axilla, and extending to the elbow-joint. From the time it began to be developed, it freely pulsated. In the operation for its removal, an incision was made from the middle axillary region along the whole length of the tumor, laying bare the sheath of the brachial artery, with its nerve and vein, to within two inches of the elbow-joint. After dissecting the diseased mass from the axillary plexus of nerves, the profunda artery came into view. This was remarkably enlarged, passed into the top of the tumor, and spread out into a vascular plexus, which freely anastomosed with the recurrent branches of the brachial below. The pulsation proceeded from this vascular plexus. The profunda was tied about two inches from its origin at its entrance into the tumor, and was divided. The nerves were then dissected separately from the morbid mass, beginning at the axillary plexus and proceeding along the whole length of the tumor; with the exception of the ulnar nerve, which was found passing through the lower half of the tumor. This was so hard as to foil the operator in the attempt to split it, for dissecting out the nerve. He then divided the nerve, removing about four inches of it; the effect of this was loss of feeling in the little finger. When removed, the tumor was 22 inches in circumference. The wound united well. Five months after the operation; the patient's health is good, and the feeling in the little finger is rapidly improving.

THE WESTERN AND SOUTHERN MEDICAL RECORDER.

April, May, June, July, August, September, 1842.

On Congestive Fever. By J. T. Bradford, M.D., of Augusta, Ky.—The first object of the physician in this form of fever, Dr. B. thinks, should be to restore the blood to the surface, and thus to relieve the heart and the system generally; then he should rec-

tify or restore the secretions. These objects may be attained with the use of calomel, brandy and sinapisms. For producing reaction Dr. B. relies chiefly on the latter. He condemns the employment of cathartics and regards mild laxatives as beneficial.—When he prescribes *ol. ricini* he invariably adds a small portion of *turpentine*, [*ol. terebinth?*] with it. This appears in his experience to obviate the sickness which castor oil is apt to cause. It also imparts activity to the bowels. Opium is often essential and salutary. Unfortunately for the sufferers from this fever, too much medicine is usually given, and it is given without discrimination.

Thoughts on the Biliary Secretion. By the Editor, Dr. James Conquest Cross. Dr. C. is convinced that bile allays instead of increasing irritability of the bowels; and that its action on them is sedative, and not stimulant.

On the Secale Cornutum. By J. T. Bradford, M.D.—Dr. B. has delivered 587 women since the year 1830. Of these, 48 took ergot, or one in about 15. Only one child of the 48 was still-born. Dr. B. has adopted the following principles;—1. Ergot at the close of utero-gestation increases the parturient throe; 2. Before the end of the fourth month, it will not increase uterine pain or contraction; 3. Instead of producing abortion in the quantity in which it is usually given, it is on the contrary one of the best and safest means of preventing it; 4. It has no unpleasant effects on the foetus.

Extraordinary Case of Osteo Sarcoma. By J. Hamilton Johnson, M.D., of Shawneetown, Ill.—The disease was located about the bones of the knees of a lady. She was slightly injured by a fall, which originated it. In about 6 years, it measured 29 inches in circumference. Mercurials, iodine, hyd. potassa counter irritants, sarsaparilla, &c. &c., were tried without benefit. The disease was removed by amputating the limb. The tumor weighed 22 lbs. when the limb was amputated.

Hints on the Cultivation of Therapeutics. By the Editor.—The author designs to illustrate the importance of studying the influence of atmospheric constitutions in modifying diseases and in counteracting and promoting the efficacy of remedies. It is

admitted that atmospheric constitutions impart modifications to diseases, but they have been too much neglected by modern physicians. Every new epidemic is a new subject for study and new facts must be accumulated.

The modifying influence of atmospheric causes is apparent from the fact, that any treatment, which may be successful in sporadic cases, will be found more or less inapplicable as a settled plan upon the appearance of an epidemic. The yellow fever in Philadelphia in 1793 yielded to small and repeated doses of calomel and jalap, yet the same fever in the same city and elsewhere, in other years, was not medicable so successfully by the same means. Systematic views of disease never fail to abandon us when we are called upon to encounter an epidemic. Epidemics are not less numerous than they are diversified in character. No physician has ever yet lived long enough to see two perfectly identical epidemics. Though their general features may have resembled, they have invariably presented peculiarities sufficient to prove them distinct individualities. When therefore in an epidemic, we find the means that are available in sporadic cases, to fail us, we should have recourse to the careful study of the older authors. The change in the character of disease at various periods within the knowledge of some living physicians eminently establishes the power of atmospheric influence. In 1813 what was called the cold plague prevailed, and calomel and purgatives proved eminently successful in its management; this gave credit to the purgative plan; but in 1830 a manifest alteration occurred, since which period purgatives are found to be, by far, less salutary than previously. The fevers are now more typhoid in their grade of action, and a treatment considerably modified must be pursued in their cure.

Selections from Foreign Journals.

ANATOMY AND PHYSIOLOGY

Pathological Observations confirming the Experiments of Panizza on the Nerves of the Tongue.—In this paper, which seems to be published by the Medico-Chirurgical Society of Bologna, by whom the patient was examined, there is but one original observation. It relates to a man fifty-two years old, who, after suffering for some time from wandering pains in his limbs, and being actively treated for them, was attacked by pain in the head and dulness of sensation in the left side of the face. The latter slowly extended over the right side also, and to the interior of the face, and ended in complete insensibility of every part supplied by the fifth nerves. Sight, hearing, and the sense of smell were unaffected. Many experiments were made to determine his power of taste; and it was found perfect for all sapid substances: he could distinguish the qualities of each article of food at his meals as well as he could when in health, and could discern the change and loss of savour which ensued when he kept them in his mouth. From the loss of common sensation, however, swallowing was difficult: he could not drink a large quantity at a time, and he was often choked in the attempt to swallow fluids. He was treated with electricity with slight temporary advantage. He died of intercurrent disease, but his body was not examined.—*Bulletino della Scienze Mediche. Aprile, 1841.*

Vascularity of the Crystalline Lens.—*Mr. Toinbee.*—I have not only been unable to trace vessels into the anterior capsule, but I hope to prove that in the healthy state no vessels do enter it. The posterior capsule of the lens is, however, injected with facility, and contains large and numerous ramifications of blood-vessels; I ascribe to them the function of supplying the crystalline lens with a nutrient fluid. These vessels arise from the arteria centralis retinæ; the latter, having traversed the centre of the vitreous humour, expands upon the capsule and forms the ramification just noticed. Now, in some injections which I have made of the eyes of a human fœtus, of the sixth or seventh month, these vessels were not confined to the posterior surface of the capsule; they pass round its border and extend upon its anterior face to the extent of one quarter of a line. I have not been able to make a perfect injection of the vessels of the capsule of the lens in ages antecedent to the fifth and sixth month of the fœtal life, and therefore am unable to say whether, in the very early periods of developement, the anterior capsule, like the membrana pupillaris, is entirely traversed by vessels; the crystalline lens would under such circumstances, be completely surrounded by blood-vessels.

The branches of the arteria centralis retinæ in the early periods of life, as noticed above, extend upon the anterior surface of the capsule. Immediately as they reach the latter they become straight, run parallel with each other, and are directed towards the centre of the anterior surface for the distance of a quarter of a line, when they stop in their course and form looped dilatations, which give origin to small veins. It is most probable that these vessels recede at subsequent periods of developement, so as to leave the whole of the anterior surface of the capsule capable of being permeated by the rays of light. These vessels in a diseased state, are sometimes prolonged into the whole of the anterior capsule, (or to speak with more propriety, the anterior half of the capsule,) where, in morbid specimens, they have been injected by Schroeder Vanderkolk. The capsule of the lens is thus pervaded by large and numerous ramifications of blood-vessels, which I believe pour out upon its inner or lenticular surface a nutrient fluid; *this fluid will immediately come in contact with the mass of delicate cells described by Schwann as situated between the lens and the capsule.* It is but probable that the nutrition of the lens is effected by these cells receiving the elements of the blood, and conducting them to the lens, through which they are diffused.—*Medico-Chirurgical Review*, April, 1842.

On the Muscular Coat of the Stomach. By M. NOEL GUENEAU DE MUSSY.—The author makes four layers of muscular fibres in the stomach, by dividing the superficial or longitudinal layer into two, which he calls, respectively, cardiac and pyloric. The former he regards as the continuation of the longitudinal fibres of the œsophagus, the latter of those of the duodenum. [The distinction is unimportant, and not accordant with the analogy of the muscular coat of the stomach to that of the œsophagus and intestines, which is exact, if the stomach be regarded as a part of the one tube dilated on its left side. The arrangement of its muscular fibres is the same as would be produced in any other part of the canal, if such a dilatation could be effected.]—*Gazette Médicale*. Juin 4, 1842.

On the Structure of the Intestinal Villi in Man and certain of the Mammalia, with some observations on Digestion, and the Absorption of Chyle.—By JOHN GOODSIR. Having fed a dog with oatmeal, milk, and butter, the author examined the intestinal villi three hours afterwards, when the lacteals were turgid with chyle, and the gut full of milky chyme mingled with a bilious-looking fluid. In the white portion of the fluid, which was situated principally towards the mucous membrane, numerous epithelium cells were found; some of which had evidently (from their form) been detached from the surface of the villi, whilst others had been thrown off from the interior of the follicles of Lieberkühn. The villi were turgid, and destitute of epithelium except around their bases. Each villus was covered by a very fine smooth membrane, continuous with what Mr. Bowman terms the basement membrane of the mucous surface, which is reflected into the follicles. The villi were semi-transparent, except at their free or bulbous extremities, where they were white and nearly opaque. The summit of each villus was crowded, beneath the enveloping membrane, with a number of perfectly-spherical vesicles, varying in size from 1-1000th to 1-2000th of an inch; the matter in the interior of which had an opalescent milky appearance. At the part where these vesicles approached

the granular texture of the substance of the villus, minute granular or oily particles were situated in great numbers. The trunks of two lacteals could be easily traced up the centre of the villus; and as they approached the vesicular mass, they subdivided and looped; but in no instance could they be seen to communicate directly with any of the vesicles.

These vesicles can scarcely be considered in any other light than as cells, whose lives have but a very brief duration, selecting from and appropriating the materials in contact with the surface of the villi into their own substance, and then liberating these, by solution or disruption of the cell-wall, in a situation where they can be absorbed by the lacteals. When the gut contains no more chyme, the development of new vesicles ceases, the lacteals empty themselves, and the villi become flaccid. During this interval of repose, the epithelium is renewed, for the protection of the surface of the villi, and for the secreting function of the follicles of Lieberkuhn. It is considered by Mr. Goodsir that the epithelium-cells have their origin in certain nuclei which he detects scattered through the basement membrane.

There appears to be a strong resemblance between the process of absorption in animals, as thus explained, and that which takes place in plants through the medium of the spongiole.—*Edin. New Philosophical Journal*, July, 1842.

On the Chemical Analysis of the contents of the Thoracic Duct in the Human Subject.—The author, availing himself of a favorable opportunity which presented itself of examining the contents of the thoracic duct in a human subject, procured an hour and a quarter after death by hanging, to the amount of six fluid drachms, obtained by analysis the following result:—

Water, per cent.....	90.48
Albumen, with traces of fibrinous matter.....	7.08
Aqueous extractive, or zomodiae	2.56
Alcoholic extractive, or ozmazome	0.52
Alkaline chloride, carbonate and sulphate, with traces of phosphate, and oxide of iron.....	0.44
Fatty matters.....	0.92

100.

The fatty matters possessed the same general characters as those of the blood, except that they did not contain phosphorus, as appeared from their yielding an alkaline, instead of an acid ash by incineration. The aqueous extractive differed from that of the blood by giving a ferruginous ash. The salts obtained by incineration from the alcoholic extractive yielded a larger proportion of alkaline carbonate than those of the blood. The author is confirmed, by the experiments he made on the present occasion, in his former views concerning the cause of the white colour of the chyle, which he ascribes to the presence of opaque white salivary matter as one of its constituents. The author then gives the results of his microscopical examination of the globules of the chyle, which he finds differ totally from those of the blood. He points out as being remarkable the large quantity of fatty matter existing in the chyle, and constituting an hydrocarbonaceous ingredi-

ent, which is constantly being added to the mass of blood, and is very rapidly consumed, as appears from the small quantity of this matter discoverable in the blood itself. The proportional quantity of ozmazome in the chyle he finds greatly to exceed that contained in the blood.—GEORGE OWEN REES, M.D.; *Proceedings of the Royal Society, No. 52, Feb. 10, 1842.*

Influence of the Coronary Circulation on the Action of the Heart.—By a variety of experiments on the hearts of dogs and rabbits, in which the animals were pithed, the thorax opened as quickly as possible, and ligatures applied to the coronary arteries, Mr. Erichsen found that the action of the heart ceased considerably sooner than when no ligatures were applied. In an animal that is pithed, but the heart of which is uninterfered with, cardiac pulsation will go on for an hour and half, under the influence of artificial respiration, but only, at an average, for about twenty-three minutes and half after ligature of the coronary arteries, and about thirty-two minutes and forty seconds after the death of the animal. He therefore agrees with Dr. Hall in thinking that ossification of the coronary arteries, a fatty condition of the heart, a contracted aortal, or deficient mitral valve may, by interrupting the flow of blood through the coronary vessels, give rise to syncope or sudden dissolution.—JOHN E. ERICHSEN, Esq. *Medical Gazette, July 8, 1842.*

Relative Sizes of the Trunks and Branches of Arteries.—Ratio of the area of each arterial trunk to the joint area of its branches, or of its branches and continuation:

	Trunk.						Branches.	
Arch of the aorta	-	-	-	-	-	-	1	: 1.055
Innominate	-	-	-	-	-	-	1	: 1.147
Common carotid	-	-	-	-	-	-	1	: 1.013
External carotid	-	-	-	-	-	-	1	: 1.19
Subclavian	-	-	-	-	-	-	1	: 1.055
Abdominal aorta to the last lumbar arteries					-	-	1	: 1.183
Abdominal aorta just before dividing				-	-	-	1	: .893
Common iliac	-	-	-	-	-	-	1	: .982
External iliac	-	-	-	-	-	-	1	: 1.15

From this it follows that the notion of earlier anatomists, that the arterial canal enlarges as trunks divide into branches, is true, though the enlargement is less than was supposed. There is, however, one constant exception to the law now stated: namely, where the aorta divides into the common iliac arteries; for there, or at the division next lower down, the stream is always contracted.

The effect of such an arrangement must be to increase the velocity of the current, not only in the iliac arteries themselves, but in the arteries given off from the trunk above them, such as the mesenteric of the renal; and it is, surely, not improbable that the acceleration of the circulation through the kidneys, and through the organs from which the roots of the portal vein are derived, is the special purpose which so singular an arrangement serves.—JAMES PAGET, Esq., of St. Bartholomew's Hospital; *Medical Gazette, July 8, 1842.*

MATERIA MEDICA AND TOXICOLOGY.

Phloridrine a New Medicine.—Phloridrine is a new medicine which is now very highly spoken of by French practitioners as a useful adjunct to our cinchona preparations. It has been used for some years in Germany, Poland and France. It is extracted from the bark of the roots of the apple-tree and the wild cherry-tree and is thus prepared: the bark of recent roots is boiled with water sufficient to cover them, for half an hour. This is poured off, and the same quantity is again used; these two fluids are mixed together, and at the end of six hours deposit the phloridrine in the form of a deep red velvety-looking matter.

M. Lebaudy, the editor of the *Journal des Connaissances Medico-Chirurgicales*, says, its efficacy is so decided that we cannot hesitate to class it with the most powerful febrifuges; and it has this advantage over quinine, that it never induces gastralgia.—*Braithewaile's Retrospect*, July, 1842.

Mode of preserving Nitrate of Silver.—M. DUMERIL has for a long while employed a very simple process for preserving the nitrate of silver from the injurious effects of exposure to the air, when run into sticks. It consists in merely coating the caustic with engraver's sealing-wax, which contains a large quantity of shellac. This wax adheres very well, and forms a strong and smooth varnish, as it were, which remains unaffected by the atmosphere. Thus protected the nitrate no longer stains the fingers, injures the caustic-case, nor is in any way changed by the moisture in the air, possesses a greater degree of solidity, and, at the same time, the process is of exceeding service in practice, inasmuch as when wanted for use, a small part only of the caustic need be uncovered by means of a penknife, so that its application can be restricted to the part where it is required. This is of peculiar utility in ulceration of the throat, aphthæ, fissures, &c.—*Prov. Med. Journal* July 2, from *Bull. de Thér.*

Taraxacine.—Mr. Polex has extracted from the milky juice of the *Leontodon Taraxicum*, a crystallizable substance, which he has designated Taraxacine. The milky juice of the plant is boiled in distilled water, by which means the albumen is coagulated, carrying with it the resin, the fatty matter and, caoutchouc. The concentrated liquor is filtered, and allowed to evaporate spontaneously in a warm place. The Taraxacine crystallizes during this operation, and should be afterwards purified by repeated crystallizations from alcohol or water. It forms arborescent or star-shaped crystals, which melt readily, are not volatile, and have a bitter and rather acrid taste; they are sparingly soluble in cold water, but dissolve abundantly in boiling water, in alcohol or ether, and in the concentrated acids without decomposition. Taraxacine should be classed among the neutral vegetable principles and it contains no azote—*Berzelin's Report on the Progress of Science*.

Coffee as an Antidote in Poisoning by Morphia.—DR. B. FOSGATE.—To relieve himself of a severe attack of tooth-ache, Dr. Fosgate swallowed in solution one and

a quarter grain of the sulphate of morphia, equal to about seven and a half grains of solid opium. In about half an hour, a sensation of thickening and rigidity of the muscles of the back of the neck came on, and gradually extended itself to all the flexors of the limbs. In about five hours severe nausea succeeded, accompanied by efforts to vomit. Tea and sour cider increased the efforts to vomit so much that the stomach rejected fluids the moment they reached it, so that a second mouthful could not be swallowed before the first was rejected. Prostration of strength and apathy, with full slow pulse, and pricking sensation of the skin, were added to the other symptoms which were continually increasing in severity, when coffee was proposed. One gill of cold strong infusion of coffee was swallowed, and was retained about five minutes; the distressing symptoms, however, were by it abated, the nausea in part subdued, as was also the sensation of rigidity of the muscles; and the occasional repetition of this simple remedy during the course of the night completely removed all the distressing symptoms. Dr. Fosgate states, that, whilst suffering from the severe nausea, but previous to the exhibition of the coffee, his mind was depressed, and he felt considerable anxiety, no pleasurable sensations or reveries having been felt. But after the draughts of coffee, the depression of mind and all anxiety vanished, and there succeeded that exquisite revelling of the imagination so much sought after by the opium-eater. This state continued for five or six hours, and was succeeded by sound sleep, on awaking from which he experienced a few hours of lassitude. The morphia had been taken after eighteen hours fasting.—*Edinburgh Medical and Surgical Journal*, January, 1842.

Saturation of Acids and Alkalies.—Mr. HENRY SCHOLEFIELD.—Thinking it probable that a few remarks upon the subject of saturation, as connected with the preparation of prescriptions, may be of advantage to the dispenser, I have arranged the following, accompanied by a table, for the purpose of showing at a glance, the quantities requisite for the purpose; which, although containing nothing new, may, nevertheless, prove to be of practical utility, in a collected form, as an article of reference.

The advantages of definite proportionals over the ordinary methods resorted to for saturation, are very considerable. From the one of adding either acid or alkali until effervescence has ceased, great variations are likely to ensue; whilst from that of testing, by means of turmeric and litmus papers, the product is almost certain to contain alkali in excess, in consequence of the free carbonic acid being sufficient of itself to affect the test-paper.

In the application of this table it should be observed, that the articles adduced are those of the London Pharmacopeia, 1836, in their *pure* state; consequently if either be deteriorated in any way, the rule is unavailable: for example, the hydrated sesqui-carbonate of ammonia is composed of the carbonate and bicarbonate of the base, the former of which evaporates upon exposure to the air, leaving the latter a neutral salt, requiring, during the process, a decreasing quantity of acid for saturation. Pharmacutists should, therefore, select a crystalline portion for operation in preference to using the powder.

I have calculated lemon juice as containing one ounce of citric acid in fourteen fluid ounces, which is the average ratio; but as it varies according to the time of

year, and from other causes, latitude of one drachm is given. Supposing the articles kept by chemists and druggists to be in a perfect state of purity, this table will be found intrinsically correct, and available for all ordinary purposes in compounding prescriptions wherein “quantum sufficit ad saturationem” is ordered.

One Scruple.	Lemon Juice.	Citric Acid.	Tartaric Acid.
	Drachms.	Grains.	Grains.
Potassae Bicarbonas,.....	3 to 4	13.68	14.85
“ Carbonas,.....	3½ to 4½	16.76	17.95
Ammoniae Sesquicarbonas,	5 to 6	23.74	25.44
Sodae Carbonas,.....	2 to 3	9.72	10.41
“ Sesquicarbonas,....	3½ to 4½	16.86	18.07

The alkaline standard of a scruple is chosen for the convenience of calculation; with the acids it is not presumed that manipulators will weigh to the minute decimal parts of a grain, yet I conceive accuracy essential in arranging a table, from which dispensers may act according to their judgment.—*Pharmaceutical Transactions*, No. 9.

Poisoning by Sulphuric Acid. Detected in the Urine.—Dr. SCOFFERN, Lecturer on Chemistry at the Aldersgate School of Medicine, London, was called to a girl who had poisoned herself with sulphuric acid. Black frothy matter issued from the mouth; the extremities were cold; pulse almost imperceptible, and the breathing laboured and irregular. Her cap, and some other articles of dress, were stained with black marks. Whitening mixed with milk was freely given, and she rallied under its use, but vomiting followed of a dark grumous matter, and this was succeeded by all the symptoms of gastritis, and although she sometimes appeared to be improving, yet the result was fatal. Her death occurred on the afternoon of the second day, and for some hours previous, owing probably to the administration of a few drops of laudanum, she had been totally free from pain. She died suddenly and without a struggle.

On dissection, the lips were found excoriated and much blackened; the œsophagus congested, and also blackened; the cardiac and pyloric orifices of the stomach intensely inflamed, blackened and excoriated, while the middle portion of the stomach was not so much affected; the duodenum slightly affected, and the remaining parts of the intestinal tube nearly filled with flatus. The kidneys were very much inflamed, *exerting an acid reaction on litmus paper*. Dr. Scoffern, as a matter of curiosity analysed a minute portion of the cap, and found the results to be most satisfactory. Distilled water in which this had been digested, copiously precipitated chloride of barium, and another piece of cap on being treated in a test tube, gave off an abundance of sulphurous acid gas, evidenced by the blue colour produced on transmitting it through a mixture of iodic acid and starch.—Finding that the kidneys on being cut into, afforded a fluid which reddened litmus paper, he applied the same test (which was first proposed by Devergie) to it, and obtained similar results, “thus demonstrating its great value, and supplying an interesting fact to the physiologist.”—*London Medical Gazette*, May 27, 1842.

Poisoning of the East India Company's Camels in Caubul, by Digitalis.—The following notice is taken from the “Chemist” for August 1842, in which it is credited to the *Agra Alchbar*, an Indian newspaper.

“Some time since a frightful mortality reigned amongst the camels belonging to the East India Company. A committee was appointed to investigate the causes. It is supposed that these animals were poisoned by digitalis, a plant which grows abundantly in the valley of Caubul. The natives, it is said, maliciously mixed it with the forage intended for those useful animals.

“Montgiardini, who has studied the effects of this plant on animals, says that mammiferous animals are very sensible to its action, and that it is so much the more dangerous to them, as their stomach more resembles that of man.”

Antidote to Corrosive Sublimate.—M. MIALHE, in a note read to the Academy of Medicine, of Paris, Aug. 16, states, as the results from his experiments, that the hydrated proto-sulphate of iron (a substance quite innocuous) possesses the property of instantly decomposing corrosive sublimate. The products of the decomposition are the proto-chloride of iron and the bisulphate of mercury, inert substances.

Poisoning with Verdigris.—Three workmen lately died at Lyons, from eating at a tavern, peas boiled in a copper vessel. M. D’Arcet, however, mentions a curious instance of exemption from any injury, in the case of a number of Cossacks encamped at Paris, in 1814. Their cooking utensils were lined with verdigris and yet no ill effects ensued. He ascribes this to the quantity of bones used,—supposing that they neutralised the action of the oxide of copper.—*Journal de Chimie Médicale.*

Poisoning by the Liquor of Indigo Blue.—This substance is usually prepared by adding sulphuric acid to indigo, and a portion of the acid is probably more or less in a free state. At one of the manufactories in France, a workman accused of a robbery, swallowed from 700 to 800 grammes (a gramme being twenty grains) of the above liquid. Repeated vomitings ensued, and the matter thrown up produced a marked effervescence. His mouth and clothes were stained of a blue colour.—On removal to the hospital, magnesia diffused in milk was copiously given, and after a few days the patient was discharged, cured.

As several cases of a similar nature have lately occurred, M. Chevallier proposes that those who keep the article in question for sale, should be required to have it deprived of its excess of acid.—*Ibid.*

PATHOLOGY AND PRACTICE OF MEDICINE.

On a very simple means of arresting Epistaxis.—By Dr. NEGRIER, of Angiers.—This consists in nothing more than closing with the opposite hand the nostril from which the blood flows, while the arm of the same side is raised perpendicularly above the head. In every instance in which he has had recourse to this means

during the past three years M. Négrier has always found that it suspended the hemorrhage: a fact of which he offers the following explanation.

When a person stands in the ordinary posture, with his arms hanging down, the force needed to propel the blood through his upper extremities is about half that which would be required if his arms were raised perpendicularly above his head. But since the force which sends the blood through the carotid arteries is the same as that which causes it to circulate through the brachial arteries, and there is nothing in the mere position of the arms above the head to stimulate the heart to increased action, it is evident that a less vigorous circulation through the carotids must result from the increased force required to carry on the circulation through the upper extremities.—*Archives Générales de Médecine*, June, 1842.

Apparent Death by Lightning.—By Dr. HARTMANN, of New Ruppin.—Three persons were at the same instant struck by lightning. In one the symptoms were severe and remarkable. He was a healthy man of twenty-six. When the author saw him, an hour and half after the stroke, he lay completely unconscious, as if in apoplexy. His pulse was less than 60, full and hard; his respiration snoring; his pupils dilated and insensible. There were frequent twitchings of the arms and hands; the thumbs were flexed and immoveable; and the jaws firmly clenched.—Soon after the author arrived, severe clonic spasms came on, so that four men could scarcely hold the patient in his bed; and his body was drawn to the left side. As soon as these had relaxed he was bled to 16 oz., cold was applied to the head, a blister to the nape, and mustard poultices to the legs. Stimulating enemata and opium were also administered; and in the course of twenty-four hours the patient's consciousness slowly returned, and he was soon completely recovered. The only external injury discernible was a red streak, as broad as a finger, which extended from the left temple over the neck and the sternum, to the precordial region, and which disappeared completely in a few days.—*Medicinische Zeitung*, Juni 15, 1842.

Rupture of the Trachea.—By Dr. BREDSCHNEIDER, of Fischhausen.—The patient was a child one year and three quarters old, who was suffering from bronchitis with some signs of hydrocephalus, among which was that of incessantly and violently tossing its head about. On the 5th day of the disease a considerable tumour formed suddenly over the neck and chest. It began below the cricoid cartilage, reached upwards to the right ear, and extended downwards over both sides of the chest. A small incision was made into it, air escaped with a hissing noise, and, by the aid of pressure, the tumour collapsed. Two days after this the child died, and a rent was found in the trachea, half an inch long, on the right side, below the first cartilaginous ring. Was this produced by the violent movement of the head, or by coughing?—*Casper's Wochenschrift*, Juli 9, 1842.

Traumatic Tetanus treated by Free Bleeding.—By Dr. C. C. HIGGINS, of Staffordshire.—The patient wounded his hand on February 15th, with a straw-cutting engine, the nail part of one finger being completely divided. In fourteen days the

wound was apparently well. On the night of the 21st Feb., he slept in a hovel exposed to the weather, which was cold and frosty. On the 25th, Dr. H. found him complaining of violent spasmodic pain in the epigastrium with great difficulty of breathing; stiffness about the muscles of the neck; an inability to open his mouth, and difficulty of laying down; the pulse 120, full and throbbing, but not much fever. The next day, he suffered much from pain and spasm of the diaphragm and of the pectoral muscles; and to these symptoms was subsequently added a complete state of opisthotonos. The treatment is detailed from Feb. 25th, to March 10th. He was bled three times; 20, 30 and 16 ounces being taken.—After the bleeding on the first day, he was ordered to take calomel grs. iv, opii grs. ij, and nauseating doses of tartar emetic combined with a saline aperient every three hours. In the evening he was ordered opii gr. iss, every three hours and a mixture composed of camphor, ether and laudanum. These remedies were continued for several days, the opium so freely at one time as to produce a complete state of intoxication. Their occasional use was persisted in, as late as to March 10th, up to which time the least motion excited the spasmodic action. From this period, the patient, we are told, has continued to improve, with occasional spasmodic twitching, and is now nearly well.—*London Lancet*.

Case of suddenly-occurring and as suddenly-ceasing Dumbness.—By Dr. BICKING, of Muhlhausen.—The patient, a strong lad of fourteen, has, for three successive years, become suddenly dumb in the middle of October and has remained so till the beginning of the following March, when his speech has again suddenly returned. No external cause seems to have acted upon him previous to the occurrence of the dumbness, nor, during its continuance, has he ever shown any sign of general bodily or mental disorder. Medical treatment has been of no avail.—Qy. —May there be imposture here?—*Oesterreichische Med. Wochenschrift, Mai 14, 1842*.

Rhubarb as an external Application in Sloughing Venereal Ulcers.—The author reports one case in which rhubarb, applied in powder, was useful in severe and extensive venereal ulceration of the abdomen and wrist, after some other applications had failed. It caused, however, considerable pain and irritation, and could only be applied on alternate days. This was continued for six weeks, by which time the ulcers had “nearly healed.”—ALFRED MARKWICK, Esq., North Brixton; *Medical Gazette, July 29, 1842*.

Death from Peas.—On the 27th of June a labourer, aged sixty, was brought to the hospital, who had been suffering since the 22d from an obstruction of the bowels, caused by a surfeit of gray peas on the 21st. When he came to the hospital he was in a sunken state, and died suddenly as he was being carried up in a chair to the ward. The rectum contained upwards of a pint of peas, which had been swallowed in a dry state, and almost without mastication, and had undergone no other change in their passage through the intestine than that of becoming swollen by the absorption of moisture. They had formed a solid mass in the rectum, and filled almost the entire pelvis, pushing up the bladder (which was greatly distend-

ed) and prostrate, so as to render the evacuation of urine, by any effort on the patient's part impossible.—GEORGE JOHNSON, Esq., King's College Hospital; *Medical Gazette*, July 15, 1842.

Ulcer on the Thorax communicating with the Right Lung.—The patient was a woman of thirty-one years of age, of scrofulous diathesis. During winter, when confined with a disease of the hip-joint, she had had occasional paroxysms of cough, with slight hæmoptysis; but in March she had regained flesh and strength, when, unfortunately, she caught fresh cold and had a return of cough, with profuse expectoration and perspiration. In May a scrofulous ulcer, which she had previously been troubled with, broke out on the right side of the thorax, and, assuming a phagedenic character, laid bare a portion of the fourth and fifth ribs. On the 25th of May the author's attention was directed by the patient to a curious noise proceeding from the ulcer, and which, on examination, proved to proceed from the expulsion and entrance of air in respiration; showing that a communication existed with the lungs. On the morning of the 24th of the following month she was found lying in her bed with such a profuse hemorrhage from the ulcer, that the person who saw it described it as "pumping out" each time that the patient breathed or attempted to speak. She died in ten minutes after. No examination of the body was allowed.—J. S. ALLEN, Esq., of the St. Marylebone Infirmary; *Lancet*, July 30, 1842.

Leeches to the Knee in Dysmenorrhea.—M. TROUSSEAU.—In three hospital patients under the care of M. Trousseau, the catamenia have followed the application of a leech to the internal surface of the knee. In one case a leech was applied to the right knee; while it held on, the patient experienced nothing particular, but as soon as it fell off, pains in the loins came on, which lasted about an hour, and the discharge then appeared. The next day it was arrested again, and a leech was applied to the left knee; and the discharge appeared as before, and continued as usual during three days. In another case, the pains of uterine congestion commenced with the application of the leech, which adhered during an hour. The effect produced by one leech is not wonderful, says M. Trousseau, because if the bleeding is allowed to continue, as large a quantity of blood flows as the ordinary amount of menstrual discharge.—*British and Foreign Medical Review*.

Nature and Treatment of Scrofula.—After enumerating the different forms of scrofulous cachexia, Dr. RÖESCH arrives at the conclusion that scrofulous affections are produced by an excess of acid matters in the fluids of the body. Agreeing with the ancient physicians in his theory of the disease, he recommends their plan of treatment, viz. absorbents, alkalies, and fat or oily matters. He says he has observed that, in those countries where the children get a quantity of lard and other fat matters with their food, that scrofula is extremely rare. Cod-liver oil, is therefore, according to him, one of the most suitable remedies to administer in this disease, seeing it possesses the rare properties of being at once a stimulant, a roborant, an antacid, and nutrient. He considers that the iodine in it will have a very secondary effect, the other properties of the oil being the most valuable.—*Ed. Med. and Surg. Journ.*, July 1842, from *Haeser's Archiv.*, Oct. 1841.

SURGERY.

On a new Cranial Saw.—By M. BERTHERAND.—The author has invented a saw for cutting the cranium, in examinations after death, and calls it a *cranial cly-clotome*. It consists of a saw, concave at one edge and convex at the other, which, by means of a screw, can be turned in its long handle, so as to present either edge at will in the direction for cutting. It is also fitted with a copper conductor, which can be worked in the same way, and fixed at any required distance from the edge, so as to prevent the saw from passing too deeply through the skull.—*Gazette des Hôpitaux*, Juin 23, 1842.

Mr. Stafford's Treatment of Structure of the Urethra.—The single lancetted stilette, or urethral perforator, is passed down to the stricture, the exact distance of which from the extremity of the urethra is first ascertained. When the point of the instrument is arrived at and rests upon the contraction, (which is known by means of its graduation,) and is in an exact line with the natural course of the canal, the instrument is held and maintained in that position by the left hand, the forefinger of which being passed through the ring on the under part of its handle, the thumb of the right hand is passed through the ring on the handle of the stilette. The stilette is then pressed gently and gradually forward, *in the direction of the canal*, when, on reaching and resting on the stricture, the lancet is protruded at its point, and is thus made to incise the stricture, immediately after which the bougie or catheter may be passed with facility.—WILLIAM COULSON, Esq., Surgeon to the Magdalen Hospital; *Med. Gazette*, No. 763, July 15, 1842.

Moxa in Rheumatism.—The writer reports excellent effects from the use of the moxa among the labouring poor of Ireland, who appear to be very subject to local rheumatism, in consequence of exposure and insufficient clothing. Mr. Leney soaks a piece of lint in a strong solution of nitrate of potass, then dries it, and cuts off pieces the size of the thumb-nail, which he fastens with thin adhesive plaster over the seat of pain, sets fire to the opposite extremity, and then applies the blow-pipe. The pain during the operation is very severe, but the Irish prefer it much to the application of blisters!—JOHN LENEY, Esq. Bray; *Med. Gazette*, No. 763, July 15, 1842.

Morphia in Strangulated Hernia.—Mr. Lyell records a successful case. Within three hours, the patient had three grains of opium, and four and a half of hydrochlorate of morphia, and the rule which Mr. Lyell would recommend is, *to employ the morphia in half grain hourly, or half-hourly doses, till the patient is fairly narcotised*. JOHN LYELL, Esq., Fife; *Lond. and Edin. Journ. of Med. Science*, No. vii. July, 1842.

Surgical use of the Magnet.—In the workshops of Fairbairne (in Belgium) there has been recently put up an artificial magnet of great power, at the level of the

eye. Every instant one may see a turner, or an adjuster, or some other kind of workman, who has had a particle of iron driven into his eye, running to the magnet, which draws it out as soon as the eyelids are separated and the eye is held near its pole. One may conceive from this how a magnet might be made of sufficient power to draw a piece of iron even from the flesh or from the bones.—*Gazette des Hôpitaux*, Juin 14, 1842.

Remarkable Case of Thoracic Fistula.—By Professor RETZIUS, of Stockholm.—The patient is a clarionet-player, who notwithstanding this diseased state, can follow his avocation and take long walks. He closes the opening in his side with a cork; and as often as he *uncorks* himself, air mixed with pus passes freely in and out through the aperture.—*Tidskrift for Läkare*, 1839, and *Schmidt's Jahrbucher*, No. 3, 1842.

Intra-parietal Hernia after a Wound of the Abdomen.—By M. BERARD.—The case detailed in M. Berard's clinical lecture affords a good example of an accident which is apt to occur not only in penetrating wounds of the abdomen, but in operations for hernia. In the endeavour to force the intestine (which had protruded) back into the abdomen, it was pushed up between the layers of abdominal muscles, and here, in the cavity thus artificially formed, became strangulated. The case was the more perplexing, because, when the intestine was in this position, the finger could be easily passed into the abdomen, and the intestine seemed to be entirely reduced.—*Gazette des Hôpitaux*, Juin 28, 1842.

Tumours in the Bladder.—Mr. DOUGLAS relates a very interesting series of cases of tumours in the bladder, which he has collected from various sources. The most important point he illustrates, is the possibility of their becoming so incrustated with calcareous deposit from the urine, as to be mistaken and operated on for stone, if sufficient care be not taken in the examination. He relates one case occurring in the Glasgow Infirmary, where this mistake actually took place, and where an instrument was introduced to crush the supposed calculus, whereby a portion of the tumour was detached, and was found lying loose in the bladder after death, which took place from inflammation. Such cases are to be distinguished by the absence of the ringing sound, and of the firm distinct feeling of contact of the instrument against a hard body, which alone should warrant our operating in cases of stone.—*Lond. and Edin. Monthly Journ. Med. Sci.* July, 1842, from *Lond. Med. Gaz.* Feb 4, 1842.

Fracture of the Thigh by Muscular Contraction.—M. NARANOVITCH relates, in the *Journ. de Méd. et de l'Histoire Naturelle*, the following example of this.

A cavalry soldier, confined to hospital for a scrofulous ulcer of the right knee, was sitting on the ground, before the fire, with his legs crossed, when, wishing to rise to go to bed, without supporting himself on his hands, he felt his right thigh crack, and he immediately fell back. The femur was found fractured at the centre. M. N. says, that this case differs from most of those fractures caused by the

action of the muscles, in the circumstance that there was no pre-existing disease in the broken bone. In the position in which the soldier was, the femur represents a lever of the third order, so that the muscles gain in rapidity and intensity what they lose in power from the mode of their insertion. It is remarkable, and this case confirms the truth of the observation of the author, that the generality of fractures caused by muscular force take place in the thigh. Similar cases have been recorded by Samuel Cooper, Desportes, and Rostan.—*L. & E. Month. Journ. Med. Sci.*, July, 1842, from *Gaz. Med. de Paris*, 2d April, 1842.

MIDWIFERY.

Cold Acetic Injection into the Placenta to effect its delivery.—Dr. MONJON, of Genoa, in cases of puerperal uterine hemorrhage, injects into the placenta, through the umbilical vein, cold water slightly acidulated with vinegar; having previously emptied the vein of the blood which it contains. The injecting being done promptly and with some force, the immediate expulsion of the placenta generally takes place and the hemorrhage ceases. The first trial of this means by Dr. M., being successful, he informed a number of practitioners of the fact; and they have since pursued the same course, with a happy result. If the first injection should fail, another ought after some time to be used, taking care to let the fluid already injected flow out. The quantity of liquid employed for each injection is half a kilogramme [about one pint].—*Jornal de Acaademia Imperial de Medicina do Rio de Janeiro*, Abril, 1842.

Five Cardinal Points in Labour.—Dr. BEATTY.—In studying the phenomena of labour, there are five principal subjects for consideration: 1st. The moving power. 2d. The body to be moved. 3d. The channel of exit. 4th. The materials lining that channel. 5th. The constitutional temperament of the patient. It is well known that in the majority of instances, such a harmony exists between these several objects, as to secure the safe termination of the process; but any deviation from the proper proportion that 1, 2 and 3 bear to each other, is productive of either delay or difficulty in the delivery. Thus a deficiency in No. 1 (the contractile power of the uterus) may, while Nos. 2 and 3 (the fœtus and pelvis) are of normal dimensions, be the sole cause of protracted labour. It is certainly erroneous, to place such a case as this under the head of difficult labours, as has been done by Denman. There is no difficulty to be overcome; the delay arises from the want of the *vis a tergo*. Neither the patient nor her child are exposed to danger from the tediousness of the labour, and this leads to an important caution against judging of the danger of a case from the time it occupies. We should always bear in mind the difference between delay and difficulty. Delay implies deficiency in the moving power, while difficulty suggests the idea of an abnormal condition of Nos. 2 and 3, either an excess in the dimensions of the fœtus, or a diminution in the capacity of the pelvis. Now, while simple delay is seldom productive of bad results,

and is usually remediable by appropriate treatment ; difficulty arising, as I have said, from mechanical obstruction, resisting the energetic action of the expulsive force always induces danger.—*Dublin Journal of Medical Science*, July, 1842.

Singular Case.—By Dr. RUSSEGER.—A woman, who had already borne four healthy children, was, in the seventh month of her fifth pregnancy, bitten in the right calf by a dog. The author saw the wounds made by the animal's teeth ; which wounds consisted of three small triangular depressions ; by two of which the skin was merely slightly ruffled ; a slight appearance of blood was perceptible in the third. The woman was, at the moment of the accident, somewhat alarmed ; but neither then nor afterwards had any fears that her fœtus would be affected by the occurrence.

Ten weeks after she had been bitten, the woman bore a healthy child, which, however, to the surprise of every person, had three marks corresponding in size and appearance to those caused by the dog's teeth in the mother's leg, and consisting, like these, of one larger and two smaller impressions. The two latter which were pale, disappeared in five weeks ; the larger one also is not now so large or deep-coloured as it was at birth. The child is, at present, four months old. *Oesterreich, Medicinische Wochenschrift*, No. 19, Mai 7, 1842.

Case of Short Funis.—The funis in this case was only seven inches and a half. In Dr. Churchill's tables, the average length is eighteen inches ; the next most frequent length, twenty-four inches. The shortest cord in 500 cases of the latter gentleman was twelve inches, the longest fifty-four. Mr. Stone, however, has met with a shorter funis than that of the present case, namely one of only six inches.

Dr. Thomson is of opinion that a quick delivery of the fœtus is always or generally followed by a prompt expulsion of the placenta.—Dr. J. B. THOMSON, London ; *Lancet*, No. x. June 4, 1842.

Case of Uterine Polypus, and of Short Funis.—A woman was delivered on the 4th of December, and on the 6th she was again taken, with what she supposed to be labour-pains. Mr. Collyns on examining, found a large substance partly in the vagina and partly in the uterus, which was soon expelled by the efforts of the womb. It proved to be an organized tumour, of an oblong form, which had been attached to the womb by a neck about two inches long, and the thickness of one's finger.—The tumour, which was perfectly solid, looking like flesh, with small arteries and veins, running through it, measured sixteen inches in length, eleven in circumference, and weighed two pounds and a quarter. The woman got perfectly well.

The same practitioner mentions another case in which the funis was only, or not quite, six inches long. This case was marked by alarming hemorrhages during pregnancy, but not during parturition.—WM COLLYNS, Esq. ; *Prov. Med. Journal*, No. xviii. August 6, 1842.

Case of Triplets.—On examination, the breech was found presenting, with a hand hanging quite out of the passage, showing that it was a case of twins. The

feet were easily reached, and the child, a female, was delivered. During the whole of this time, the arm remained hanging out, but receded as soon as the first child was born; and the right shoulder presenting, the mother was, after sometime, delivered of a dead male child, connected with the cord of which was a double placenta. Fresh pains came on, and a third child, a male, came away. The third child was in no way connected with the first two.

The woman had attained her full time, and three children were all perfectly formed; weighed six pounds and a half each, and were sixteen inches long. Dr. DAVID, Edinburgh; *London and Edin. Jour. of Med. Science*, No. vii. July, 1842.

Large Congenital Tumour.—A male child was born on the 22d of July last, with a tumour extending from the middle of the *os frontis* to within about an inch of the ear, and from the upper eyelash to the coronal suture. Its circumference round the base was nine inches; its substance was firm and doughy; its shape conical, on the apex it contained fluid. Round its base, the bone was raised into a circular ridge, but an opening into the brain could not be felt. The child is in good health and thriving. *The mother states that, in an early period of her pregnancy, she had been disgusted by the sight of the entrails of a pig.* ALEX. BREDON, Esq.; *Dublin Medical Press*, No. 188, August 10, 1842. [In our foreign selections of this number, a remarkable case is given of the impressions which may be made on the fœtus through the mother.]

Four children at a Birth.—An example of this is recorded by Dr. BIGGS in the *Dublin Med. Press*, Jan. 5, 1842. The mother was only six months pregnant. All four children were males. The first was born dead, the funis presented. The second and third were born alive, but the former lived only one, and the latter only two hours. The fourth was born dead. Dr. B. extracted three placentæ,—two united together and one separate. He says nothing of the fourth placenta.

Spontaneous gangrene of the Cervix Uteri and part of the Vagina.—M. BARON communicated to the Academy of Medicine of Paris, 22d February, a case, in which, without any symptom of disease of the genital organs except leucorrhœa, hemorrhage from the vagina suddenly came on, and on examination, the separated parts were found lying in the outlet. They presented no trace of disease, except a dark-coloured line at the point of separation, marking the existence of gangrene. The patient recovered.

CHEMISTRY AND MEDICAL JURISPRUDENCE.

Test for Arsenic.—Mr. Rodgers, at a recent meeting of the Royal Medico-Botanical Society, mentioned the following test for arsenic:—The galvanic test was first proposed by the German chemists, who employed a simple apparatus, similar

to that used for electrotype purposes, placing the suspected solution in the inner vessel, and a solution of hydrochloratè of ammonia in the outer; they then put a piece of zinc in the outer vessel, and bent a platinum wire (attached to the zinc) so as to dip into the inner one. In the course of a few hours the arsenic was deposited on the wire —*Provin. Med. Jour.*, June 4, 1842.

Corpora Lutea.—To ascertain the precise structure of one of these bodies, is of importance in a medico-legal point of view. The ovary, like other parts, being liable to disease, its vessels may become varicose, and apoplexy, as it is termed, forms no uncommon appearance in it, consisting of an irregular effusion of blood into its tissues, “varying indefinitely as regards size.” Tubercles may also occur in it. Both these morbid conditions may be mistaken for corpora lutea. The following appearances ought always to be present in true corpora lutea; 1. A distinct external envelope, in contact and in union with the stroma of the ovary, but capable of being dissected away from it entire. 2. A solid substance, fleshy-looking, red, pinkish or yellow, divided into a greater or less number of lobuli. 3. An inner membrane or ovisac thickened. 4. A central deposit of granular or other matter, or the remains of it. 5. The general microscopic appearance presented will form a good auxiliary means of diagnosis. The fact of one of the radii reaching as far as the surface of the ovary, is useful as a diagnostic indication, but is not decisive, being occasionally present in the false as well as in the true bodies.—FRANK RE-NAUD, Esq., Edinburgh; *London and Edinb. Month. Jour. of Med. Science*, No. vi. June, 1842.

Case of Suicide.—A woman twenty-seven years of age, was committed for theft to the jail of Edinburgh. She was much addicted to drinking, and was apparently ill of delirium tremens “after” admission. That night she complained that somebody was chasing her. She was calm in the morning, and she got a jug, composed of glazed earthenware, containing milk, along with a spoon of iron, for breakfast. The matron saw her at eleven, before going to church, gave her a bible, and desired her to learn the first psalm. She was found, at one o’clock, by the matron, on her return from church, lying dead on the floor, her throat horribly cut, and the fragments of the broken jug lying beside her, and covered with blood. The jug was broken into pieces, some of which were of considerable size, and had very sharp edges and angles.

This case forms one of a class not unfrequent in prisons in which suicide is attempted very shortly after confinement, especially by persons convicted for the first time, accustomed to indulge freely in alcoholic liquors, and strongly predisposed to, if not actually under delirium tremens. It is probable that this woman was really under the influence of the disease now named on the very day of her admission. It is remarkable that she had selected, as the instrument of suicide, the broken fragments of her milk jug, in preference either to the glass of the window, or the iron spoon, which if sharpened on the stone floor of the cell, might have been easily made available to the purpose of self-destruction. Indeed, the latter instrument had been partially used for that end; since the wound after having been originally made with the fragments of the jug, seemed to have been deepened

and enlarged by the handle of the spoon having been employed in "boring and pressing aside the parts."—Dr. SPITTAL, Physician to the Royal Infirmary of Edinb.; *London and Edinb. Monthly Journal of Med. Science*, No. vi. June, 1842.

Death from Lightning.—By Professor CARRESI. Read at the Scientific Congress, held at Turin in September 1840.

Professor Puccinotti, in his Treatise on Legal Medicine, announces a sign of death from lightning, which is not imitable by human malice, and may therefore be considered as pathognomonic.

The eyes of those who are killed by lightning, are found brilliant and protruding, so that the eyelids cannot be closed over them. It is exactly in the two lateral segments of the albuginea thus left open, that the sign in question is observed, and which may be considered as a sanguineous capillary infiltration, or an electrical burning. It consists in dark bloody spots, of a conical form, and much resembling an inverted pterigium. They occupy the side of each eye, with their basis towards the iris and their acute angles corresponding to the internal and external angles of each eye.

This mark of death from lightning, is usually accompanied with an injury of the epidermis resembling a burn. Small portions of it are found separated, and rolled up and crisp, and sometimes wounds of an oval shape are noticed, passing from right to left in an oblique direction, and extending into the subcutaneous cellular tissue.

Professor Puccinotti is disposed to attach equal importance to both of these signs as characteristic of this kind of violent death. Not so, however, with Professor Carresi. In three cases, seen by him at different times, the dark bloody spots in the eyes were invariably present, but the injuries to the epidermis of the wounds were wanting. In one case only, there was on the back of the right arm, an apparent hardness and scorching of the skin, surrounded by an areola. Its size was about an inch, and its shape quadrangular.—*Archives de la Medecine Belge*, March, 1841.

Instant Death from a Wound of the Stomach.—Timothy Daly, a policeman, in attempting the arrest of a robber, was shot by a pistol bullet. He almost instantly expired.

On dissection, a wound of a round shape, and of the size of an (English) sixpence was found between the seventh and eighth ribs of the left side, and another on the right side over the last rib. The lungs and heart were healthy and uninjured. The blood was universally fluid, but there was none extravasated into the cavity of the chest. The ribs just named, were each found to be fractured. The stomach was removed and examined; it was distended with half digested food.—There was an aperture with blackened edges, of the size of a shilling, an inch below the junction of the œsophagus with the stomach on its posterior surface, and another corresponding aperture on the anterior surface of the stomach, also at the cardiac end, but lower than the aperture on the posterior surface. The liver and intestines were healthy and uninjured, and no important blood-vessel was wounded.

Mr. R. H. Semple, the reporter of the case, imagines that instant death "must

have been caused by the sudden shock given to the nervous system by the passage of the bullet through the distended stomach. No other cause of death (he observes) can be assigned, for no other viscus was wounded, nor was any important vessel ruptured."—*Lancet*, May 14, 1842.

Spontaneous Ecchymosis resembling external injury.—Dr. LADOS mentions the following cases. A female, five months advanced in pregnancy, and subject to no complaint, except occasional severe headache, found herself one morning on awaking, covered with dark blue spots, precisely similar to those caused by blows. A bleeding and some laxative medicines were sufficient to remove these at the end of ten days.

In another instance of a female, six months advanced, the conjunctiva of the right eye became suddenly bloodshot, and two irregular ecchymoses appeared on the cheek of the same side. The patient ascribed their occurrence to a severe fright, and was treated successfully in the same way as the former.

If such cases should become the subject of medico-legal inquiry, how are we to discriminate?—*Archives de la Medecine Belge*, December, 1841.

Signs of Maturity in new-born Children.—According to Chaussier, if a mature child be measured immediately after birth, the middle of its length will be exactly at the navel, or a very little below. It is, however, doubtful whether this happens in all cases; and Mende has impugned its general accuracy. The following are some results noticed by Mr. Taylor, Lecturer on Medical Jurisprudence at Guy's Hospital, and Dr. Geoghegan, Professor of Med. Jurisp. in the Royal College of Surgeons in Ireland.

Case.	Whole length.	Attachment of the Umbilical Cord.
1	18½	a quarter of an inch below the centre.
2	20	half an inch " " "
3	17½	half an inch nearly " "
4	16½	half an inch " "
5	19	half an inch " "
6	17	a little below
7	18	exactly at the centre.
8	17	exactly at the centre.
9	20¾	a little below.
10	19½	a little below.
11	18¾	exactly at the centre.

Guy's Hospital Reports, April, 1842.

Feigned Diseases—Bloody Urine.—There are certain substances which, when taken as food, invariably impart a bloody colour to the urine. One of these is the prickly pear or Indian fig (*Cactus opuntia*). When the Spaniards first took possession of America, many of them were alarmed by observing that they passed what they supposed to be bloody urine, but it was soon discovered that the red colour of the secretion was owing to the liberal use they made of that fruit. Dr.

Hennen, in his *Military Surgery*, quotes a similar example from Ellicot's Travels for determining the boundary of the United States. He says, "his people ate very plentifully of this substance at an island of the Mississippi, and were not a little surprised the next morning at finding their urine appear as if it had been highly tinged with cochineal. No inconvenience resulted from it."

Another vegetable substance, with which we are more familiar, and which will produce the same effect, is *beet root*. Desault relates the case of a person who noticed that he every morning voided urine of a deep red colour, exactly such as would result from adding fresh blood to that liquid, except that no deposit took place. The man became frightened and consulted M. Roux, who, after some examination, began to suspect that the colour was owing to something else than the admixture of blood. It turned out that his patient was in the habit of supping every night upon the red beet root, and as soon as he relinquished this as an article of diet, the supposed bloody urine was wanting.—*Dr. Watson's Lectures. London Medical Gazette, July 8, 1842.*

Miscellaneous Articles.

Remarks on the Medical Profession.—[Our townsman, Mr. Burnap, whose name is at present becoming so widely known to the readers of ethical and literary writings, delivered an Oration, in September last, on "THE PROFESSIONS," before the Literary Societies of Marshall College, Mercersburg, Pa.*; and the Societies have since published it. It is gratifying to find an intelligent mind entertaining just views concerning the relation of the office of the wise and good physician to society. Mr. Burnap's remarks on the medical profession coincide with principles which have ever been cultivated in successive ages, by exemplary possessors of the doctorate. It is pleasant to know, that,—if at the present day, it is our lot to be sometimes chagrined by the imprudent countenance, which is given to *Quacks* by some persons in the high places of society, who ought, by a wiser course, to aid with their intellectual sympathy the arduous cultivation of the great ends of medical science,—there are others who see and acknowledge that there is a sacred confidence which is due to the services of a conscientious and enlightened physician:—

"Doubly is he a physician, who is likewise a wise and good man,"—says Mr. Burnap. "If he be such a man, such is his access to the intimacy of the domestic circle, such the nearness of his approach to the heart when it is softened by suffering or

*"The Professions: An Oration delivered before the Literary Societies of Marshall College, Mercersburg, Pennsylvania, at their Anniversary, September 27, 1842. By George W. Burnap, Baltimore: John Murphy." pp. 31.

sorrow, that a few years establishes him as the endeared friend as well as the medical adviser of the family. In this capacity no human accomplishment will be lost. He will have opportunities to probe and heal domestic wounds which have rankled in secret for years, and caused perhaps more unhappiness than any bodily malady. No stores of accurate and extensive information will be useless. Eloquence even will be as useful to the physician in his daily walks, as it is at the bar or in the pulpit. His audiences, it is true, are not so large but he meets them more frequently, and they listen to him with greater confidence and less reserve.

"This union of social influence with professional skill is by no means impossible, nor is classical and literary accomplishment by any means excluded by a successful practice of the healing art. It is generally found I believe that he who finds time to study his cases most thoroughly, will also create opportunities to keep alive that general culture, which is after all the legitimate solace of professional life. Science and literature should ever walk hand-in-hand. To whom shall the community look for a maintenance of a tone of intelligence and cultivation, if not to her professional men, whose lives have been set apart for the pursuit of useful knowledge, and whose daily occupations bring them largely in contact with the world? Who can so well help forward every good work as he, whose acquaintance is most extensive, and who knows most intimately the wants of society?

"The physician has the opportunity to become a wise and an accomplished man, and he must be especially wanting to himself if he do not become a good man. His daily employment is a school of benevolence, and the best means of augmenting the virtues is their constant exercise. Those of you whose tastes have led you to prefer this calling, have chosen a good part, an occupation which will never suffer the mind to stagnate, nor the heart to grow cold, and which with all its fatigues and privations, fills up life as pleasantly perhaps as any other employment. You yourselves have lived long enough to have felt the healing and comforting influence of the presence of the good physician. You have seen him moving in society the solace of the suffering, the counsellor of the ignorant, the mediator of peace, the delight of friendship, and the ornament of the social circle. And you have said to yourself, that with such a companion you would choose to walk the pilgrimage of life, and with him at your side to encounter the onset of the last dread enemy, from whose grasp no human arm can deliver. The idea of the good physician rises up clear and vivid to your mental eye. Go forth, and realize it in your future career."

Monument to Vesalius.—The memory of this great pioneer of the modern studies of anatomy and physiology is to be honored at Brussels, his native city, by the erection of a bronze statue in one of the public squares. The works of Vesalius are now extremely rare. We know of one copy of them only in our city; and unfortunately that is mutilated.

Doctors.—Now that I am talking of doctors, what a strange set they are, and what a singular position they hold in society! Admitted to the fullest confidence of the world, yet by a strange perversion, while they are the depositaries of secrets that hold together the whole fabric of society, their influence is neither fully

recognised, nor their power acknowledged. The doctor is now what the monk once was, with this additional advantage, that from the nature of his studies and the research of his art, he reads more deeply in the human heart, and penetrates into its most inmost recesses. For him, life has little romance; the grosser agency of the body reacting ever on the operations of the mind, destroys many a poetic day-dream and many a high wrought illusion. To him alone does a man speak, "*son dernier mot*;" while to the lawyer, the leanings of self-respect will make him always impart a favourable view of his case. To the physician he will be candid, and even more than candid,—yes, these are the men who, watching the secret workings of human passion, can trace the progress of mankind in virtue and in vice; while ministering to the body, they are exploring the mind; and yet scarcely is the hour of danger past, scarcely the shadow of fear dissipated, when they fall back to their humble position in life, bearing with them but little gratitude, and strange to say, no fear!

The world expects them to be learned, well-bred, kind, considerate, and attentive, patient to their querulousness, and enduring under their caprice; and after all this, the humbug homœopathy, the preposterous absurdity of the water cure, or the more reprehensible mischief of mesmerism, will find more favour in their sight than the highest order of ability, accompanied by great natural advantages.

Every man—and still more, every woman—imagines himself to be a doctor. The taste for physic, like that for politics, is born with us, and nothing seems easier than to repair the injuries of the constitution, whether of the state or the individual. Who has not seen, over and over again, physicians of the first eminence put aside, that the nostrum of some ignorant pretender, or the suggestive twaddling old woman should be, as it is termed, tried? No one is too stupid, no one too old, no one too ignorant, too obstinate, or too silly, not to be superior to Brodie and Chambers, Crampton and Marsh; and where science, with anxious eye and cautious hand would scarcely venture to interfere, heroic ignorance would dash boldly forward and cut the gordian difficulty, by snapping the thread of life. How comes it that these old ladies of either sex, never meddle with the law? Is the game beneath them, when the stake is only property and not life? or is there less difficulty in the knowledge of an art, whose principles rest on so many branches of science, than in a study founded on the basis of precedent? Would to heaven the "Ladies Bountiful" would take to the quarter sessions and the assizes, in lieu of the infirmaries and dispensaries, and make Blackstone their aide-de-camp, vice Buchan retired.—*Dublin University Magazine*.

New Haven Medical Association.—The physicians of New Haven appear to enjoy a harmonious and agreeable intercourse. We learn from the published notice of their association, "that since its foundation, no physician of respectability has ever established himself in the city without becoming a member of the Association; and for a period of thirty-two years, but *two* of its members have *withdrawn* from its connection. The Association numbers at this time eighteen out of the twenty regular physicians in the city. It is confidently believed that, from the manner of organization of the Association, and the way of conducting its meetings, it conduces more to raise the standard of the profession to that grade to which it is entitled, than any similar association in the country. It is probably

owing to this fact, that the physicians of New Haven are on better terms with each other, than in any other city in the Union."

Society for the Collection and Arrangement of Medical Statistics and the promotion of Medico-Chirurgical Science in the City of New York.—This society is composed of the Alumni of the College of Physicians and Surgeons of the University of the State of New York. Dr. Goldsmith in a letter to the Editor of the New York Lancet gives the following account of it:—

The object is, the collection and classification of facts in medicine, and the re-dissemination of such facts when classified.

It is intended that the members scattered over the country, shall communicate to the officers any and all the important medical observations and cases with which they may meet in their practice; whether such observations or cases are isolated or in numbers.

It is the duty of a committee appointed for the purpose, and residing in New York, to classify and arrange the *matériel* thus collected, to select such cases as possess interest and importance, and thus prepared, to publish the transactions of the association, and transmit them to the members thereof, and the profession generally.

Another feature is this:—The committee will from time to time, by means of circular letters, ask the attention of all the members to certain specific subjects of inquiry; and in this way, have a number of men simultaneously investigating the same subject, and thus by extended and varied observation, gain the means of affording the best and fairest solution of such questions as present themselves for consideration. The committee will likewise transmit at once to the distant members, such facts as are important enough to warrant instant dissemination, and at all times will stand ready to afford any information which their central position will enable them to give.

Pathological Society of Philadelphia.—At the annual election for officers, held September 24, 1842, the following gentlemen were elected: *President*, Nathaniel Chapman, M.D.—*Vice-Presidents*, Jacob Randolph, M.D., Samuel George Morton, M.D., Charles D. Meigs, M.D.—*Secretary*, Thomas Stevenson, M.D.—*Treasurer*, George W. Norris, M.D.—*Curator*, Edward Hartshorne, M.D.

Dinner to Dr. Randolph.—A very large number of the professional friends of Dr. Jacob Randolph, in Philadelphia, welcomed him with a public dinner on the 7th September, upon his recent return from Europe. Dr. Chapman presided, assisted by Dr. Jackson, Dr. Franklin Bache, and Dr. William Rush, as Vice-Presidents.

Preservation of the Human body by the Acetate of Alumina.—Dr. Sharpless and Dr. Grant injected the body of a gentleman from Canada,—who died, at Philadelphia, in June last, aged 64 years, and weighing at the time of his death about 140 pounds,—with a solution of corrosive sublimate and afterwards with a solution of

acetate of alumina, to enable his family to take him to Canada. The weather was very sultry, with rain and sun nearly every day. The result was satisfactory. On the arrival of the body in Canada, there was a slight odor, but not of putrefaction, or any other indication of such a change.

The indiscriminate use of Drastic Purgatives by the Physicians in the Valley of the Mississippi.—DR. FLINT states, that nothing in his whole surgical experience in the West has been more remarkable than the disproportioned frequency of diseases of the rectum and the adjacent textures. He thinks that this disposition is principally to be attributed to the indiscriminate use of drastic purgatives, both as remedials as well as prophylactics. He represents the practice of a large proportion of the practitioners of the Valley of the Mississippi to consist almost entirely in the exhibition of violent cathartics; and this simple and easy empiricism is imitated by the patients themselves whenever they are ill. The mischievous practice here deprecated, as well as the mercurial mania, have unfortunately a much wider range than the “far West,” and are but too general throughout the country.—*Medical Examiner.*

Arsenical Nostrum.—We observe that a surgeon of some distinction in Albany, New York, has been mulcted in a fine little more than nominal, for denouncing the practice of an empirical cancer doctor, who eradicates cancers by means of an ointment, of which the most active ingredient is arsenic: the other constituents were drawn from a very reluctant witness on the trial, and thus the wonder-working secret stands exposed before the world.—*Medical Examiner.*

New Phrenological Division of the Contents of the Cranium.—M. CARUS, in his late work on Craniotomy, divides the brain into the cerebral hemispheres, the corpora quadrigemina, and the cerebellum. These he speaks of as the anterior, the middle and the posterior cerebral mass; to these three divisions he regards what he calls the three cranial vertebræ—the frontal, parietal, and occipital bones—as corresponding. Certain analogies in the lower tribes of animals have guided him in the formation of this view of the matter. Pursuing the subject, he places the intelligence in the cerebral hemispheres, the sensibility (*gemeingefühl*) in the corpora quadrigemina, and the will, desire, and instinct of generation, in the cerebellum; and he tells us that herein “lies the key to all craniotomy that is true and supported by physiological principles.”—*Br. and For. Med. Rev.*

New English Medical Journal.—A new journal published at London, semi-annually, it is probable will be a great favorite with professional readers. It is entitled, “The Retrospect of Practical Medicine and Surgery; being a half yearly journal, containing a Retrospective view of every discovery and practical improvement in the medical sciences. Edited by W. BRAITHEWAITE, Surgeon to the Leeds General Eye and Ear Infirmary; and Lecturer on Midwifery and the diseases of Women and Children, in the Leeds School of Medicine.” Messrs. Adee and Estabrook, New York, have begun the republication of it at one dollar per annum.

Air-douche of the Eustachian Tube.—This paper is violently dissuasive of air injections of the Eustachian tube. The author seems to think that the injections, not actually effected in a great many cases in which it is pretended by the operator and imagined by the patient to have been done. Among the disastrous effects which have resulted from attempts to perform the operation, or from its actual performance, he enumerates inflammation of the throat and tube itself, as well as of the tympanum, so severe as sometimes to terminate in suppuration; emphysema caused by laceration of the mucous membrane of the Eustachian tube or posterior nares; rupture of the membrum tympani; deliquium so protracted as to threaten life; death. These last two formidable consequences the author considers are to be referred to the *direct pressure of air upon the brain*, in consequence of the enormous force sometimes exerted in injecting with air a narrowed Eustachian tube.

The author has found remarkable good effects from the use of iodine in conjunction with sarsaparilla, in the swelled tonsils succeeding the inflammatory sore throat of scarlatina, by which deafness is so often induced.—*Medical Gazette*, No. xxxiii., May 6, 1842.

Snake Bites.—Prof. DRAKE, of Louisville, Ky., wishes physicians to communicate to him such facts concerning the bites of our venomous snakes, as may have fallen under their own observation, or that of persons qualified to observe. He is especially desirous of learning whether the symptoms produced by the bite of the rattle-snake, the copper-head, and the prairie rattle-snake, are the same; whether there is an annual recurrence of any of these symptoms; and to what extent confidence should be placed in the efficacy of those native plants which have been recommended as antidotes. We invite the attention of our readers to this request, and hope that they will aid the cause of science by communicating any facts in their possession of the kind desired.

Mesmerism—Clairvoyance—Phreno-mesmerism.—[The following extracts are from an Introductory Lecture, delivered November 4, 1842, by Professor Dunglison, on Certain Medical Delusions.]

By a series of well devised and carefully conducted experiments, guided by a philosophical mind, anxious only for the discovery of truth, one of my learned colleagues* has prostrated the whole fabric of clairvoyance, and scattered to the elements the fertile creations of the veteran enthusiast. He has shown to the satisfaction of "any unprejudiced, candid, and intelligent man," that there is, in such cases, no identification of sense with sense, of sentiment with sentiment, of thought with thought, of movement with movement, and of will with will. The whole is a delusion, accidental or designed. Still, there is much well worthy of the study of the physician in the phenomena exhibited by one who is thrown into the singular hysteroid condition, that constitutes what is termed the *magnetic* or *mesmeric* state.

One of the most startling of recent annunciations is the statement, that if one of the compartments of the skull, as mapped out by the phrenologist, be touched whilst a person is in this state, he will immediately have his thoughts turned in the direction of the mental faculty that corresponds with the particular phrenological organ, and exhibit manifestations thereof in his actions and speech. Somepe

*Professor J. K. Mitchill.

of the phenomena, which I witnessed, were certainly most strange; and, at first aspect, were strongly confirmatory of the union between Phrenology and Magnetism, and, therefore, of the truth of both. By the same able investigator, however, this matter has likewise been put at rest. It has been demonstrated, that where the person operated upon has had no previous acquaintance of any kind with phrenology, not the slightest manifestation can be elicited; and that by stating aloud, that the manipulator is about to touch a certain organ, although in reality he touches another, the thoughts and actions may be immediately made to correspond with the organ mentioned—not with the one over which the finger is placed.—The researches of my able friend have been read before a learned society, and, for the sake of true science, I am gratified in being able to state, that they will appear in a form, which will render them accessible to all. I may cite, however, the two following deductions of Professor Mitchell, from the “*Quarterly Summary of the Transactions of the College of Physicians of Philadelphia, for August, September and October, 1842,*” just published.

“As we cannot believe in mesmeric ‘rapport,’ so we are not able to credit the existence of any peculiar sympathy between the operator and subject. Untrained or ignorant patients never shew sympathetic phenomena. I have been pinched, and hurt otherwise, a great many times, without observing any suffering on the part of my subjects, until they were taught to believe that such a relation existed; and then they very honestly felt hurt, as people do in dreams—a kind of imaginary suffering.

“The phrenological phenomena of mesmerism, when rigidly examined, are found to consist, as do most of the mesmeric wonders, of ‘such stuff as dreams are made of.’ The *excitement of the brain is general*, the *direction of that excitement is given by the mesmerised person’s knowledge of phrenology*; but the patient is not in any case aware of his mental co-operation. This singular delusion or misapprehension runs through nearly the entire subject of mesmerism; most of the phenomena of which are a strange mixture of physical impulse and mental hallucination. Phrenologists alone feel the phreno-mesmeric excitement. Persons partially acquainted with phrenology experience it only as to the organs known to them; while those who are totally ignorant of the subject present no local manifestations, until they are taught, either awake or asleep, what they should know, and what they should do. The displacement of old organs, in one city, their retention of location in another, and the adherence of the patients to the peculiar and dissimilar systems of phrenology, which they have, respectively, been taught, shew clearly, that the direction of the cerebral excitement is personal and arbitrary; while the new maps of the cranium, so widely different from each other, leave us no longer in the least doubt as to the delusive source of the compound science of phreno-mesmerism.”

Necrology.

Mors autem vellens, vivite, ait, venio.

VIRGIL. *Copa.*

The late Baron Larrey.—[In our last No. we announced the death of this veteran surgeon, the Nestor of French Military Surgery; we subjoin an Obituary notice from the Provincial Medical Journal.]

He expired on Monday, the 25th ult., at Lyons, in the arms of his son, who had accompanied him on his recent visit to Africa, to inspect the troops there; whence he had just returned. His professional life commenced in 1787, when he embarked for America as surgeon-major in the royal navy. He was afterwards attached to Napoleon's army, where he was highly esteemed. By that great general, whom he followed in all his campaigns, he was spoken of as a "most honest man." The Baron's skill as a practical surgeon is attested by his great work on military surgery, which contains the results of his long experience gained by constant practice in the most sanguinary wars that have ever devastated Europe. It is remarkably free from national prejudice, and abounds with interesting facts and useful observations. It, in addition, recommends itself to the general reader and historian as well as to the medical man, inasmuch as it contains an excellent sketch of his great master's victories and campaigns, graphically and philosophically drawn, and also furnishes information with respect to the internal arrangements of the army, for which the world was not prepared. It will scarcely be believed, that when Napoleon assembled that immense army of 400,000 men, for the subjugation of the Russian empire, little or no preparation was made for the relief of the wounded. Yet such was the fact. Larrey says, when describing the battle of Smolenski, "Here, as at Witepsk, we were in want of all sorts of things necessary for dressing the wounded. For lint we were obliged to substitute paper, and the parchment archives of the city were converted into splints." An excellent occasion certainly to bring forth the talent and ready zeal of the head of the surgical department, but one that will in no way increase the lustre of Napoleon's name. He evidently thought only of victory, and was unprepared for defeat, and even for the inevitable consequences of success.

Larrey was with the troops throughout their advance, and accompanied them also in their disastrous retreat. He attributed his preservation during the return to his habit of marching on foot. He walked almost the whole way, and never approached a fire. Those who did not observe this precaution were so benumbed by the cold, that when the bivouac fires were lighted, they did not feel the heat till the seeds of gangrene were sown. The intense cold was their principal enemy.

At the fatal passage of the Beresina, Larrey nearly lost his life, owing to his anxiety to preserve his surgical instruments, but the attachment of the soldiers saved him, for he was no sooner recognised in the crowd, than he was raised over the heads of the troops, and passed forward from man to man until he reached the bridge, then blocked-up with military materials and the bodies of the dead and dying.

Larrey, on his return, continued employed in a military capacity, and, at the time of his death, he held the rank of *Inspecteur du Conseil de Santé des Armées*. He has enriched medical science with many valuable observations, drawn from the experience of a long and active life—PEACE BE TO HIS MANES.

Died at Holmesburg, near Philadelphia, on the 25th of October last, William R. Fisher, M.D., aged 34 years.

Dr. Fisher came to Baltimore about eight years ago, and in association with another gentleman established a modern pharmacy of the first class; and eminent-

ly distinguished himself by the faithful mode in which the business was conducted. No one, who was acquainted with him, could doubt his scientific qualifications; while all who had dealings with him were witnesses of the zeal and industry with which he met calls for his services. He was one of the most useful and ardent members of the Maryland Academy of Science. In the year 1837, he was elected Professor of Chemistry in the University of Maryland, and delivered two courses of lectures in that institution, with great credit to himself. In the spring following the winter of his last course, owing chiefly to his laborious devotion to his duties, his health became seriously impaired by an attack of hemiplegia. He then gave up all his business connections in Baltimore and returned to Philadelphia, his native city, to remain with his family relations. A long interval of mental repose so far restored him, that he was enabled to resume lecturing; which he did as Professor of Chemistry in the Philadelphia College of Pharmacy, to which chair he was elected to fill the vacancy occasioned by the resignation of Professor Bache. One of the most important acts in which he was engaged was as Chairman of the Committee, appointed by the College of Pharmacy, for the revision of the last edition of the National Pharmacopœia.

Died suddenly, June 13th, of pulmonary apoplexy, at the age of 67 years, M. Double one of the most useful and respectable members of the French Academy of Sciences.

Pelletier, the distinguished chemist and professor in the School of Pharmacy, died in Paris, in July last, after a long and painful illness. He rendered great service to science by his researches, in association with M. Caventou, on the vegetable alkalies.

In Kent County, Maryland, on the 1st of October, Dr. Edward Scott.

In Charles County, Maryland, on the 26th of September, Dr. Wm. McPherson, in the 56th year of his age.

On Saturday, the 30th of last July, at his father's residence, in Harford county, Dr. Lewis Kean, a talented, amiable and respectable young gentleman. He left a large and respectable circle of society, friends and acquaintances, to regret his loss, which can scarcely be repaired.

At the city of Havana, Cuba, on 14th September, Doctor M. Morrison, aged about 35 years, for many years a resident of Buenos Ayres, South America, leaving an amiable and beloved sister to mourn his loss. [Dr. M. was a graduate of the University of Maryland.]

THE MARYLAND MEDICAL AND SURGICAL JOURNAL.

March, 1843.

Original Communications.

ART. I.—*On Hæmostasis,—and Physical Phenomena of Circulation.* By THOMAS H. BUCKLER, M.D., of Baltimore.

IN coining a name to express a novel principle, of wide application, we are often compelled to content ourselves with the selection of a word, having reference merely to some primary fact.—Thus, *venesection* only serves to express the act of dividing the coats of a vein, and has no reference to the mode in which it is done, the consequent flow of blood, or the objects for which it is accomplished; so *hæmostasis* merely serves to express the act of arresting the blood in its course;—the manner in which this is performed, the phenomena it occasions, the objects it accomplishes, and the various conditions to which it applies, as a therapeutic means, it is our present object to state.

About five years since, an uneducated man, of leucophlegmatic habit, presenting all the physical appearances of an inhabitant of a malarious district, applied to me for the relief of intermitting

fever, under which he had labored for a long time. He said that he had been using a great number of remedies, most of which were suggested by different quacks, in the neighborhood from which he came ; and that the only thing which had done him any good was to tie eel-skins tightly about the upper part of each arm, a short time before the expected return of his chill. At first, I was disposed to think that the eel-skins could only have arrested his chill, through some influence over his imagination ; but the question at once presented was, why have not other remedies exerted the same influence ; for most of these were necromantic in character ? There may be more meaning in charms, than we are at first disposed to believe. On examining the arms of this man, the eel-skins being at the time around them, I found the veins, which were unusually abundant, remarkably swollen from the complete obstruction of the venous circulation. It then occurred to me, that the prevention of his chill might possibly be owing to the accumulation of blood in the arms and its consequent withdrawal from the common torrent of the circulation, by which it was prevented from accumulating about the spleen and portal vessels.

I at once determined to try what would be the effect of arresting the venous circulation in all the extremities at once.

A gentleman, then studying medicine in my office and now a practitioner in this city, consented to subject himself to an experiment. I accordingly tied a handkerchief about the upper part of each of his arms, and applied a tourniquet to the upper third of each thigh. He complained of a painful sense of tingling in his limbs, similar to that which is experienced when we say, that the foot is asleep. He also said that he felt light-headed. I observed that his pulse became weak, his skin relaxed, and his face, on which the perspiration stood in drops, very pale. He now complained so much of disagreeable feelings, that the bandages and tourniquets were removed, having been on for a very few minutes. This trial was however sufficient to convince me, that the mechanical accumulation of blood in the extremities, and its consequent withdrawal from the common torrent of the circulation, might be beneficially adopted as a therapeutic means.

The restraints of private practice offer so few occasions for ex-

periments of any kind, that opportunities seldom occurred, in which I felt at liberty to put hæmostasis to the test. Becoming however more and more convinced of its utility, in different abnormal conditions, I was less scrupulous in applying it; and I am now convinced, after repeated experiments, of its great importance and of its applicability to the following conditions.*

1. To prevent hæmorrhage resulting from either rhexis, diapedesis, or from wounds inflicted on blood-vessels.

2. To relieve inflammatory engorgement in parenchymatous organs, or inflammations of membranous tissues.

3. To remove simple vascular congestion, and restore the balance of the circulation.

If we tie a bandage about a limb, sufficiently tight to arrest completely the venous circulation, and at the same time allow the arteries to pulsate, we shall note the following phenomena:—The veins become swollen and look as though they would burst; all the blood, they contain, is withdrawn from the general circulation, and is as effectually cut off from it, for a time, as if it had been drawn in a basin. This then is the depletory effect of the operation. Next, we notice that the patient complains of stinging or tingling in the limb, and of pain shooting along the course of the nerves; which is the irritant effect of arresting the blood. Lastly, we observe, when the bandages remain on a sufficient length of time, that the skin becomes of a livid red, owing to excessive injection of the capillaries; in other words, the whole limb appears as if it had been placed under the exhausted receiver of an air pump: and this last, we shall find to be the vascular revulsive effect of hæmostasis. If the arrestation of the venous circulation be practised on all the extremities at once, we observe other effects. The skin becomes relaxed, and the pulsation of the heart and arteries weakened. If the vessels of the whole body are in a state of repletion or fulness at the time,

*This principle has been elegantly and concisely stated by Prof. N. R. Smith, in a paper on Counter-Congestion, published in this Journal for June last. We were pleased when we saw the article; it being the expression of a principle, the utility of which we had long been convinced of and had often reduced to actual practice. The coincidence of idea served only to fortify my belief in its great importance.

we shall perhaps notice only the above phenomena. But if on the contrary, the heart and arteries are deprived of a portion of their normal quantity of blood, owing either to pre-existing anæmia,* or to the loss of the vital fluid from bleeding, so that the vessels shall be partially empty, we then notice certain other phenomena to result from arresting the venous circulation of the extremities. 1. The exhalents of the skin pour out the most abundant perspiration: 2. The individual complains of feeling light about the head, of weakness and sick stomach: 3. If we feel the carotids we find them scarcely pulsating, and in a word all the phenomena of syncope are found to take place.

Central and Peripheral circulation.—For the sake of clearness and convenience, we shall divide the circulation into the Central and the Peripheral; the first corresponding to the head and trunk; the latter, to the extremities. In reflecting a moment, we shall find, that this division is not so arbitrary, as it would at first sight seem to be. The course of the blood, from one side of the heart to the other, varies very much, according to the parts of the body it goes to supply. The blood which passes through the lungs, performs a much shorter circuit, in going from the right side of the heart to the left, than that which is sent to the feet, hands and other portions of the systemic circulation. That which traverses from the arterial to the venous side of the heart courses in circles differing in magnitude, the smallest of which are the coronary vessels of the heart, and the largest are made by the vessels distributed to the fingers and toes. The blood of the aortic circulation then, makes circuits differing to infinity in magnitude. The vessels distributed to the brain, lungs and abdomen, describe circles corresponding very nearly in magnitude; this then, we shall denominate the *central circulation*, in distinction to that of the limbs, the vessels of which, being all more remote from the heart, as a common centre, we shall term the *peripheral circulation*. The capillary vessels by which the blood of these two divisions is sent back to the heart, are entirely distinct and

*We use the word anæmia here, as having reference solely to the quantity of fluid circulated. An individual may have his blood deprived of its fibrin and coloring matter and may still have an excess of fluid in his circulation.

independent of each other. The blood of the vena cava ascendens returns to the heart, with the force it derives from the vessels which supply it, whether we consider that force as residing in the capillary vessels, or as dependent upon a vis a tergo communicated by the contraction of the heart and arteries. If then we arrest the return-blood in the upper third of one thigh, we cut off at once half of that force by which the blood is sent through the vena cava back to the heart; and we do more than this, for we arrest at the same time one half of the return-blood itself from the extremities. If we apply a tourniquet to the thigh of the opposite side, we take away nearly the whole supply of blood sent to the lower portion of the vena cava, and deprive the venous circulation of a large amount of that force which returns the blood to the right side of the heart. If at the same time the veins of the upper extremities be compressed, the whole of that circulation which we denominate peripheral is arrested.

The effects of hæmostasis are always in a direct ratio to the quantity of blood in the circulation.—If we fill an eel-skin with water and then try by tying it, to alter the quantity of fluid which occupies its different portions, we shall be foiled. But if a part of the water be emptied out, we shall be able to put ties about the skin, in such a way, that any portion will be nearly or quite empty. Now precisely the same thing happens in applying hæmostasis. In that degree of fulness of the vessels which belongs to a healthy man, after arresting the venous circulation of the extremities, we have noticed very partial effects. The reason of this is at once apparent; the vessels of the extremities were already full even to distention, and the quantity of blood which could be withdrawn from the central and transferred to the peripheral circulation was of course limited. But when we made trials, in the case of those who were already anemic, or from whom a certain quantity of blood had been previously taken, the effects of hæmostasis before described were very decided. The reason of the difference in the two cases is clear, and the cause of the result in the latter instances perfectly apparent. The vessels of the extremities had been already partially emptied by the previous depletion, and were now capable of holding a quan-

tity of blood sufficient to fill them to the healthy standard, independently of that which they would still hold from over distention, and the quantity of blood withdrawn from the central circulation and consequently cut off from the brain was proportionably great.

Various estimates have been made, by different physiologists, as to the quantity of blood contained in the human body; some have made the quantity 10 pounds, others 32; according to Wrisburg a healthy woman lost 26 pounds by flooding, and 24 pounds were collected after the beheading of a full grown woman.*—In different individuals, the quantity of blood varies as much as that of the solids. It would be altogether useless, if it were possible, to fix any definite standard of quantity, and we fear that they who attempt it, may fare like those who sought to discover perpetual motion. Let us suppose the quantity of blood in a healthy individual to be thirty pounds, and that one-third of it, ten pounds, belongs to his extremities, and suppose that hæmostasis is capable by over-distending the vessels, of transferring four pounds (we must make it a calculation of probabilities, it being as difficult to ascertain the exact proportion belonging to different portions of the body, as it would be to make a standard of quantity in the entire body for the whole human family,) from the central to the peripheral circulation, the heart and vessels of the trunk will then contain sixteen pounds, the four pounds which they have lost, being as effectually removed from them for a time, as if it had been drawn from the body. But the depletion which the central circulation has here undergone is partial in its effects, and the withdrawal of blood from the brain is insufficient to produce syncope. If now we open a vein in the arm, the blood drawn will be taken from the 16 pounds in the central circulation, and the flow of it will diminish the quantity of blood supplied to the brain, much more rapidly than if it had been taken from 30 pounds, the quantity common to the whole circulation. Two pounds drawn by bleeding from 16, the quantity in the central circulation, will leave only 14 for the trunk: whereas, had 2 pounds been taken from 30, the whole amount of blood, and hæmostasis

*See Müller's *Physiology*, p. 197.

had not been applied, it would leave 28, which would be, according to our original proposition, 18 and $\frac{2}{3}$ pounds, instead of 14 for the trunk, and $9\frac{1}{2}$ pounds, instead of 14, according to hæmostasis, for the extremities. If we draw the blood first, and then apply hæmostasis, the result will of course be the same. Accordingly when we apply hæmostasis in a full state of the circulation, only partial effects will be noted; but if on the contrary, it be adopted when the vessels are comparatively empty, we shall have the most perfect syncope induced, a condition which is now under our control, and which we can protract to any desirable extent and this too, without a loss of half the blood, that would be required to make an individual faint under ordinary circumstances.

We think it best to notice in this place various abnormal accumulations of blood, which take place in certain portions of the body, under different conditions. When an animal dies from loss of blood, every portion of its circulation is found empty after death except the vessels of its brain, and not a trace of fibrin can be found even in the heart itself. In this instance the brain being the centre of innervation invites as it were, and appropriates to its own uses, the last drop of blood remaining in the circulation.

When a patient dies of a disease, during the course of which his blood has become highly fibrinized,—in pleurisy and pneumonia for example—and especially, when the last hours of life are protracted, and nature struggles to retain the light and flitting breath of life, we find on examination after death, the heart and great vessels in its neighborhood gorged with fibrinous concretions, the presence of which Boullaud has given us the mode of diagnosing during life. These accumulations are sometimes found in such abundance, that we can take from the heart and its neighboring vessels a complete fibrinous tree. On the other hand, it has not unfrequently happened that in sudden death, occurring in those who had been previously in good health, or in such as had expired during the course of other diseases, that the heart was found destitute of even a trace of blood. A case is

mentioned by Mr. Chevallier, in which not only the heart was found entirely empty, but also the vena cava ascendens for some inches below its entrance into the right auricle.* In death happening suddenly, during the course of typhoid fever, the heart is often found perfectly destitute of blood.†

An abnormal accumulation of blood often takes place in the veins of the arms, head and neck in cases of severe catarrh, as a consequence of dilatation of the right side of the heart, and in emphysema, especially when the latter is accompanied by the dyspnoea attending an asthmatic seizure. In these conditions, we have the external jugulars swollen and the face is often puffed and œdematous. Under such circumstances every one must have observed the extent to which patients may be bled, without the occurrence of syncope. As a general rule, I know of no condition, in which an individual may lose blood to the same extent, without fainting, unless it be in some cases of pleurisy or apoplexy. The difficulty of producing syncope, under these circumstances, is doubtless owing to the tardiness with which the blood returns from the brain, because of the obstruction it meets with in the heart and lungs. There is consequently a pressure of the return-blood upwards, which prevents the sinuses and vessels of the brain from being emptied as rapidly as they would be under other circumstances. The correctness of this view may be proved by compressing the veins of the neck, when an individual is sitting up and about to faint from loss of blood. It is only necessary to apply moderate pressure with the hands, on each side of the neck, so as to arrest the return-blood from the head, and at the same time allow the pulsation of the carotids to go on. Pressure thus applied, when a patient is sitting up, will exert nearly the same influence in preventing syncope, as the removal of the gravity of blood by placing the individual in a recumbent posture.

Another instance of the abnormal accumulation of blood takes place, during the cold stage of a paroxysm of ordinary intermit-

*See Chevallier, on asphyxia idiopathica or collapse of the heart. *Medico-Chirurgical Trans.* Vol. 1, for 1815.

†See Louis on Typhoid fever, translated by Bowditch, pp. 377—8, 558.

tent fever. Modern physiologists, Müller amongst others, have come to the conclusion, that the spleen is of very little importance in the economy. They base this opinion on the ground, that it has often been extirpated without any very serious consequences having followed. This only proves that the functions of the spleen may be dispensed with during health. But in spite of the weight of such able authority, we are forced to regard the spleen as a conservative organ of immense importance, in different abnormal conditions of the circulation. M. Beclard regarded the spleen as an erectile tissue, like the cavernous bodies of the penis, but differing from them, in possessing an inherent power of active expansion and contraction, by which its capacity is increased or diminished in direct proportion to the quantity of blood it may be required to hold.* The spleen then is appended to the circulation as a sort of *cul de sac* or organ of contents, to take up and hold for a time any excess of blood which may be in the general or central circulation. Magendie injected fluid into the veins of animals and found, afterwards, that the spleen was invariably augmented in size. The same experiments have been performed by others, with precisely similar results. It has also been found to swell in animals after drinking largely of water. In all of these instances, the quantity of the circulating fluid was increased in proportion to the amount of water received into the vessels, and the spleen became the receptacle or organ of accommodation for a quantity of blood equal to the excess of fluid in the vascular system. We grant that the erectile function of the spleen may be supplied during health; but, in the exigencies of circulation which occur from disease, this organ is absolutely indispensable.

During the chill of common intermittent fever, blood accumulates to a greater or less extent in the spleen and portal circulation. This abnormal accumulation of blood there, acting as a foreign body, becomes a source of irritation and produces fever, which lasts a sufficient length of time to restore the proper quantity of blood to the arterial side of the circulation. We have seen the spleen greatly increased in magnitude during the cold stage of an intermittent, and reduced again to its original size

*See Bichat's *Anatomy* by Beclard,

after the paroxysm had gone off. The same thing has been observed by others. During the existence of chill, the blood retires from the surface of the body, and accumulates about the heart, lungs, and deep seated vessels. If under these circumstances, there were no organs capable of receiving a portion of the blood, thus thrown in upon the central circulation, the heart would become embarrassed, respiration difficult, and the portal vessels so much oppressed, that reaction could not take place, and death would be the inevitable and speedy result. The blood accumulated in the spleen, during the existence of chill, is entirely withdrawn for a time from the current of the circulation.

The vessels running into the vena porta form an independent capillary system, the office of which is to send its blood back to the right auricle. The force with which this act takes place depends upon the perfection of the capillary vessels, from which the vena porta derives its supply. In typhoid fever, the terminal blood vessels, corresponding to the lower portion of the ileum, are to a greater or less extent disabled and the recurrent force of the return-blood is in a proportionate degree weakened. In consequence of this disability in the capillary vessels, a remora of blood takes place in the vena porta and distends it beyond its normal capacity. The spleen which is now pressed upon, acting as an erectile tissue, takes up a portion of blood from the vena porta, thus compensating for the loss of power in the capillary vessels of the ileum, and enabling the return-circulation to go on more freely than it could otherwise do. With the exception of the *venæ breves*, which run from the great end of the stomach to the spleen, the vessels of the vena porta present an anomaly, in being entirely destitute of valves. This anatomical arrangement allows every facility for the ebb and flow of blood which must take place, and at the same time indicates the necessity for the erectile function which the spleen performs. During the course of continued fever, we have more blood on the venous side of the circulation than belongs properly to it. Is it not owing in part to the quantity of blood cut off from the general circulation, that the pulse in typhoid fever is weak and feeble?

In inflammation of mucous tissues and of parenchymatous or-

gans, there is generally little pain, with for the most part a weak and feeble circulation. When, on the contrary, inflammation takes place in serous, fibrous, or cartilaginous tissues, pain is severe, and the circulation bounding and active. In parenchymatous organs and mucous membranes, there is abundant loose cellular tissue, into and through which transfusion readily takes place, and also large vessels lying adjacent, in which blood is collected and thus withdrawn from the general circulation. Could we apply the hydrostatic test to a lung during the stage of primary engorgement in commencing pneumonia, we should probably find it containing several ounces of blood more than a healthy lung of the same size. May not this account for the preternaturally depressed pulse which we sometimes find in commencing pneumonia?

The fibrous, cartilaginous, and serous tissues are dense and compact, allowing little or no room for transfusion to go on; and the veins in the neighborhood of these structures are comparatively small and less abundant, so that blood cannot accumulate in them, and no fluid is consequently withdrawn from the torrent of the circulation. Hence a frank, active, and bold circulation is at once established in inflammation of these and all other similar tissues. For example, the pleura costalis and its adjacent compact cellular tissue are supplied with blood by the intercostal arteries, and the veins which carry back the fluid are very small. Accordingly, when pleurisy takes place, the circulation is (for the reasons before stated) bounding and active. The vessels in the substance of the lungs are very large, abundant, and distributed in exceedingly loose cellular tissue, and for this reason the pulse in pneumonia is weak and feeble. In acute peritonitis the pulse is corded and active, and the largest quantity of blood may be taken without producing syncope, even when the patient is sitting up in bed. In mucous inflammation of the intestines, there is on the contrary a weak and feeble pulse, and it is often difficult to take a sufficient quantity of blood from the individual, who may be in a perfectly recumbent posture at the time, without producing syncope.

Writers on the diseases of pregnancy very properly attribute the swelling of the veins of the extremities and consequent œdema,

which occur in some women during the last months of gestation, to the pressure of the womb on the iliac veins. But here they stop; and have not considered that this accumulation of blood in the extremities, and its consequent withdrawal from the circulation of the trunk, may give rise to other symptoms, which are so common during the last month of pregnancy. Mrs. C., a lady of delicate habit and feeble constitution, complained very much during the last two months of gestation, of the following symptoms; swelling and œdema of the lower extremities, which came on a short time after rising in the morning, and increased as the day advanced; throbbing in the temples, a feeling of fulness about the head, drumming in the ears—*tinnitus aurium*—palpitation of heart, and an occasional feeling of syncope. These symptoms were invariably relieved by lying down. Are we not correct in attributing all the various feelings of which she complained chiefly to the accumulation of blood in the lower extremities, in consequence of which, the trunk was deprived of its normal quantity of circulating fluid, thereby giving rise to the symptoms of anemia? The feelings which this lady experienced are generally said to be nervous; we think it quite as philosophical to attribute them in most cases to the cause which is here assigned.

Mr. R. a gentleman of delicate constitution, tall in stature, pale and anemic in his appearance, had suffered for a long time with varicose enlargement of the veins of his lower extremities. His occupation was that of a clerk, requiring him to stand a great part of each day. The distention of the varices increasing daily, and his strength gradually declining, he was at last taken with exhaustion and syncope; the latter was soon relieved by lying for a short time in a recumbent posture. His symptoms at last grew so distressing that he applied to us for relief. Was not the syncope in this case, owing directly to the abnormal transfer of blood from the central to the peripheral circulation, in consequence of which, the due supply of blood to the brain was cut off, and its innervation interrupted?

The barbarous and happily exploded fashion of stay-lacing, a short time since so common with the gentler sex, furnishes another example of the effects of *Hæmostasis*. Syncope from

tight lacing has always been accounted for by the pressure exerted upon the walls of the chest, by which the free play of the heart and lungs is prevented. When the trunk is tightly girt by the old fashioned stay, the skin on the arms becomes red and injected, owing to the distention of the veins. This accumulation takes place from the hindrance the blood meets with on its return to the right side of the heart. The greatest pressure made by tight lacing is on the upper third of the abdomen, and on the floating and short ribs, the cartilages of the latter being often made to lap, and thus sometimes become permanently distorted.* The liver is pressed upon and the circulation of the vena porta impeded. The vena cava is also girt by the pressure of the surrounding parts, and the return-blood from the lower extremities interrupted. In applying hæmostasis, we have sometimes put a compress on the centre of the abdomen and applied pressure to it by means of a girth passed round the body, after the manner of the Russian belt. Is it not reasonable to attribute syncope from tight lacing, to the quantity of blood which is withdrawn from the central circulation, rather than refer it to the direct influence of the pressure made upon the walls of the chest?

The foregoing remarks have been made mainly for the purpose of illustration: for that portion of them which may appear hypothetical, we have to urge the following by way of excuse. The labors of physiologists have rendered most of the phenomena of circulation clear and satisfactory in health, where the laws which regulate it are uniform and unvaried. But no systematic investigation has ever been made in relation to the abnormal conditions of circulation, or the modifications it undergoes in fevers of different forms, and as a result of various other morbid conditions. We think that in this respect, the circulation is less perfectly understood. Has it ever been determined, whether in fever the blood returns, under all circumstances, from different portions of the capillary system, with an equal augmentation of force: or whether the passage of blood from one portion of the capillary heart is not delayed, and from another accelerated, in various forms of febrile movements? We talk about the afflux of blood

*See a dissertation on tight lacing by J. D. Godman, M. D.

to different organs from the neighboring vessels, or from the heart itself; but nothing is said about the reflux of blood from the different portions of the capillary system back again to the heart, or of the rate or degree to which this takes place. There is a capillary heart returning the blood from the brain, another, independent of this, which sends the vital fluid back from the lungs, still another for the intestines, and another, independent of all of these, for the body generally; this last being again capable of subdivisions. May not the rate of the return of the blood be different in each and all of these, under the various forms of fevers? May not a remora of fluid take place in one set of veins, by which the return-current of blood is impeded, while from other portions of the capillary heart it is accelerated?

But independently of this, no methodical examination has ever been made as to the portions of the system in which abnormal accumulations of blood most frequently take place, and of the part which they play in the production of disease. Nor to what degree stasis of the more solid elements of the blood occurs in capillary vessels; the extent to which its fluid portions are transfused into the surrounding tissues; the conditions under which this takes place; and the influence which these elements, under such circumstances, have in the production of morbid action. The whereabouts (if the expression may be allowed) of the blood, or of its different elements in various pathological conditions has never been made a matter of systematic enquiry. We need, then, a philosophical investigation into the physical topography of the blood in the various abnormal conditions of circulation. The absence of such an inquiry has led us, we think, to regard the blood under certain circumstances as far too harmless a resident of the vessels, and to disregard the part it plays in the production of inflammation. Every preternatural accumulation of blood which takes place, whether it be the globule too much in a single passively dilated capillary, or a collection of much or little blood in any portion of the circulation, over and above the quantity which naturally belongs to it, if not promptly removed, becomes a source of more or less irritation, acts as a foreign body, and sooner or later gives rise to local inflammation or general fever.

The eye being generally selected for illustration, let us take a case of simple conjunctivitis for an example. Here the capillary vessels have lost a certain amount of their tone, or vital contractility, and have consequently become injected with an abnormal quantity of blood.* In this condition, we all agree that the indications are two. 1. To apply something which will aid the vessels in contracting, so that they may extrude their contents, resume their original calibre, and be able to resist the force with which the blood is sent to them. 2. To take away for a time the injecting force of the heart or arteries in the neighborhood.

Who has not seen the recently inflamed conjunctiva fade under the application of an astringent directly applied, where the case was purely relaxation of the coats of the vessels; or observed the conjunctiva whiten from the direct effects of an early bleeding, by which the force of the heart was cut off? But suppose in a similar case, that neither of these indications is carried out, and that the vessels are permitted to continue distended with an abnormal quantity of blood. The contained globules become a source of irritation, act as foreign bodies, (a splinter for example) inviting an increased quantity of blood to the membrane, and inducing the changes which afterwards take place. Each fresh supply of blood which is now brought, meeting with obstruction in the engorged capillaries, must pass by other channels; consequently, adjacent vessels become injected with fibrine and red globules, while the thinner portions of the blood are transferred into the cellular tissue of the coats of the vessels, and into that of the interstitial membrane. In this way, the surrounding capillary tubes are pressed upon, another mechanical impediment to circulation is thus brought about and a new source of irritation set up. Our only object is, to call attention to the fact, that blood retained for a sufficient length of time, in a dilated capillary, acts as a mechanical irritant, and thus induces the other changes which are afterwards observed to take place. The same we believe to be true, with regard to all forms of acute inflammation. After the chill which ushers in a pneumonia, a greater or less number of simply

*See Marshall Hall on the flow of blood along the minute and capillary vessels, p. 95.

dilated capillary vessels, are charged with a preternatural quantity of blood. In this condition, the language of respiration affords nothing but a puerile shrillness in the sounds on the side affected. One free bleeding may relieve this condition at once. But if, on the contrary, the bleeding is delayed, and the passively dilated capillaries are permitted to remain engorged for twelve or twenty-four hours, the blood they contain becomes a source of irritation, the coats of the vessels are thickened, transfusion takes place into the surrounding cellular tissue, and we have the auscultatory sounds furnished, which indicate what is called the first stage of pneumonia. A longer period is now required for the lung to resume its healthy state, the more relaxed coats of the vessels take a longer time to regain their vital power of contraction and expansion, and the transfused fluid has to be absorbed. The engorged portion of lung, and the fluid which surrounds it, are now likely to become fresh sources of mechanical irritation to the adjacent healthy structure; and thus layer after layer may become implicated. Is it not owing to this, that we often find a lung presenting four or five degrees of engorgements? The intercurrent pneumonia, which sometimes takes place during the course of phthisis, serves to show the agency of a mechanical cause (tubercle) in inflaming the substance of the lungs; and, at the same time, illustrates very beautifully the mode in which a portion of lung laboring under pneumonia, may act as a mechanical irritant to the parts adjacent, and the way in which it may involve in the same process of inflammation, the healthy structures which surround it. We might offer illustrations without number.

In every amputation in which we have seen the tourniquet used, much more blood was invariably lost, than in those instances in which simple compression of the artery by means of the thumb or a key, was resorted to. The difference in the quantity of blood lost, in the two cases, is so great, that the best surgeons are now in the habit of adopting in their own practice, and of recommending to others, compression of the main artery of the limb to be amputated, in place of the old method of using the

tourniquet. The cause of the difference in the two methods is obvious; for, when a tourniquet is applied, the veins of the limb are first compressed and then the arteries; the interval of time, between the interruption of the venous and arterial circulation, being always sufficient for the limb to become charged with blood.— This must happen to a greater or less extent, however dexterous the surgeon may be, in applying the tourniquets in ordinary use. If we had an instrument, that would compress the arteries and veins at one moment of time, the difficulty would be in a great measure overcome. I beg leave to propose another remedy; which is to apply tourniquets to every extremity except the one to be amputated,—and then to compress the artery above the point at which the limb is to be severed, the great artery of which should be pressed upon with the thumb, as in ordinary cases. By the adoption of this method, the force required for compression will be trifling; for the force of the heart's action will be so much diminished by the previous application of hæmostasis, that the difficulty of arresting the flow of blood in the artery, at the point desired will be rendered comparatively easy.

When any operation is to be performed on any part of the trunk, from which we have to dread the loss of blood, hæmostasis should be applied to all the extremities before the knife is used. If this precaution is adopted, syncope will take place much sooner than it would do without it; but the surgeon will have the assurance that his patient faints, not from the quantity of blood lost, but mainly on account of its withdrawal to the extremities, where he can permit it to stay until the operation is over and the bleeding vessels secured. It seems to me, that this plan must render many operations easy, which without it, would be involved in difficulty. Loss of blood in the different steps of operations is often the great source of apprehension to the patient, and of perplexity and embarrassment to the surgeon; and, I believe, that the careful adoption of hæmostasis is calculated to disarm surgery of half the terrors which arise from hæmorrhage, during and after the performance of operations.

Cases illustrating the effects of Hæmostasis in controlling loss of blood.

CASE I.—S. Myers, aged 35, a negro man of middle stature, in the employ of Mr. B., having committed a debauch the night previous, and having been exposed to a storm on his way home, was taken on the following morning, with acute conjunctivitis of the left eye. His pulse was 100 in the minute; dryness, but no heat of skin, pain in the left temple, left eye closed, anorexia.—The conjunctiva excessively injected and very red, many of the larger vessels projecting above the level of the membrane, very little chemosis and slight photophobia. I determined in this case to try what effect hæmostasis would have in blanching the eye; and, at the same time, to see how far it would control the flow of blood, after making a large orifice in one of the veins of the arm. The venous circulation was then arrested in all the extremities, by means of ligatures firmly applied as closely to the trunk as possible. On the lower extremities handkerchiefs were used as field-tourniquets; this was necessary on account of the great muscular development of the thighs, which would have rendered a simple tying of the handkerchiefs, entirely inefficient.—These ties were applied so firmly as to arrest, at first, the circulation of the arteries; but on directing him to flex rapidly the arms and legs, the arterial pulsations were felt at the wrists and ankles, and the veins were soon gorged to their fullest with blood. He complained at first of feeling sick at his stomach and light headed, but did not faint. The conjunctiva became considerably, but not entirely blanched.

The next thing was, to ascertain how far hæmostasis would control the loss of blood. A free orifice was therefore made in the largest vein of one arm, with a quick dash of a sharp thumb-lancet. The veins were emptied by a simple gush of blood, to the extent of an ounce and a half; the blood then flowed slowly for 30 seconds, the pulse grew extremely weak, and the man fainted. The quantity of blood lost was between three and four ounces. The conjunctiva was still more blanched, but not as pale as the other eye. The bandages were removed and the man being laid flat on his back soon recovered. The arm was now tied up again and blood drawn, I should think to twenty ounces, with-

out producing syncope. I then twisted the handkerchiefs, by means of small sticks run through the ends of them, until the venous circulation of each thigh was again arrested, and so soon as this was accomplished, the patient fainted a second time.— This man had been repeatedly bled, so that the syncope, which first occurred, could not be accounted for by any dread of the operation, and the quantity of blood lost was wholly insufficient to account for his fainting; more especially when after the bandages were removed, he lost nearly 20 ounces of blood, without any appearance of syncope; so far from it, this state did not come on a second time until the bandages were again tightened. It is fair to conclude, then, that syncope was produced in both instances, not from the direct loss of blood, but mainly by the accumulation of it in the extremities; the central circulation having been in this manner depleted and the due supply of fluid to the brain cut off. The conjunctiva recovered in a few days under the use of a mild collyrium.

CASE II.—A. Murray, a stout negro man, aged 28, about five feet seven inches tall, and who appeared to be in perfect health at the time, came to my office and requested to be bled. This seemed to afford a fair opportunity to test how far hæmostasis would control the loss of blood. His pulse having been slightly accelerated by walking, he was permitted to sit quietly for a short time, before the trial commenced. After resting, his pulse was 75, soft and open, and the temperature of the skin was natural. Assisted by a friend I tied all his extremities as closely to the body as I could so as effectually to control the venous circulation. So soon as the veins, which were of medium development, became distended, he complained of tingling in his arms and legs, the skin grew gradually moist, and in ten minutes after the application of the ties the most profuse diaphoresis came on. The pulse, which had grown gradually more frequent and soft, was now 85 beats in the minute and far more compressible than it was before the application of the ties; he complained of feeling giddy and light-headed. Symptoms twenty minutes after the application of the ties: pulse the same, skin bathed in the most profuse sweats, respiration less frequent and occasionally an inspiration more prolonged than the rest.

A large orifice was made in the median basilic vein of the left arm. The superficial veins which had been very much gorged were emptied in an instant. The blood then flowed freely for a minute to the extent of three ounces, when it stopped, owing to the pressure of the bandage above, on the now more enfeebled circulation in the brachial artery. The bandage was slightly loosened, so as to allow the circulation of the artery to go on again, when about two ounces more were lost; and the man fainted. The bands about the limbs were now loosened and the patient placed in a perfectly recumbent posture. He rallied completely in the course of 20 minutes, during which time, it became necessary to close the orifice in the vein. I then took between 10 and 12 ounces of blood from the arm, the patient sitting up in a chair at the time, without producing syncope. After closing the orifice in the arm, the bands on all the extremities were tightened; the most complete syncope was induced. The bandages were now taken off and in a short time he recovered his strength.

CASE III.—Edward Blake, mulatto labourer, æt. 24, a man of good muscular development, and over six feet in height, had a chill while at work, and next day sent for me to see him. He complained of headache, slight cough and pain in the back, a slight catarrh, white tongue, some heat of skin, pulse 90 in a minute, full and hard. Directed him to sit up in bed, and then tied handkerchiefs about the upper part of each arm and leg. The veins of his extremities, which were unusually large and very abundant, became excessively distended with blood. In three minutes after the last tie was fastened, he gave a slight hiccough, made an effort to vomit, and fell back in a complete state of syncope; in which condition he remained for fifteen minutes, being perfectly unconscious the whole time; I then loosened all the knots. The first evidence of recovery was a slight convulsion, which seemed to affect his whole muscular system, as if an electric shock had been passed from his head to his feet.—This I attribute to the first jet of blood sent to the capillary vessels of the brain, which had been emptied during the state of syncope. He next took a deep sigh, then opened his eyes as if

from sleep, and in a short time he recovered from the faintness entirely. He was then directed to sit up in bed for the purpose of being bled. He said: "I'd rather be bled twenty times than have *them* things put on agin. They makes me feel *wus* than I likes to feel." I tied up the right arm and took from him fifteen ounces of blood, which produced slight faintness, causing him to lie down. I next arrested the flow of blood by putting a bandage upon his arm, and when the sickness had entirely passed off, tightened the handkerchiefs about his thighs. Two minutes after this was done he fainted again, being in a perfectly recumbent posture at the time. The syncope was complete—the man seeming to be in a perfect state of suspended animation, for the space of ten minutes, when the ties were loosened. The first evidence of animation came on in a few minutes, with the same convulsive twitch in all the muscles, as was before observed. He then took a few deep inspirations, and asked for some water; the instinct of the stomach being aroused to supply the want of fluid occasioned by the previous loss of blood.

CASE IV.—M. M. aborted in her first pregnancy about the fifth month after conception. On visiting her the decidua was found protruding between the external labia; and on endeavoring to tear the membranes, preparatory to introducing the hand, a stream of blood was felt issuing rapidly from the vagina. At first I was at a loss, whether to take away the fœtus at once and attempt afterwards to stop the hæmorrhage, or to resort to hæmostasis. The latter was, however, determined on in a moment, and in a few minutes more two handkerchiefs were tightly tied about the upper part of each thigh and of the left arm.—In the course of one or two minutes the flow of blood began perceptibly to diminish; and very soon after the application of the ligatures it entirely ceased. The membranes were now ruptured, and the fœtus and decidua removed. It may be said that here the bleeding would have stopped had nothing been done; but in this case the arrestation of blood corresponded so exactly to the accumulation of it in the veins of the extremities, that the relation of cause and effect was, certainly, as satisfactory as any single case can be. Many doubt the influence of *secale cornu-*

tum in relieving hæmorrhage of the lungs or arteries; but to us its anti-hæmorrhagic properties are clear and unequivocal, although the mode in which it acts is far more difficult to explain, than it is to account for the manner in which hæmostasis accomplishes the same result.

CASE V.—C. E., aged 42, has suffered for the last five years, from carcinoma uteri. Nearly the whole of this time, several irregular ulcers have occupied the lips of the womb. She was excessively anemic, owing to repeated attacks of hæmorrhage, which came on at irregular intervals and lasted generally from one to ten days.

The only interest which this case presents, here, is the influence which hæmostasis exerted in relieving the distressing attacks of hæmorrhage to which she was subject, and for the relief of which all ordinary remedies had been used with little or no benefit.—I directed her finally, whenever the bleeding came on, to have ties put firmly about the upper part of each extremity. Not many days after she had occasion to test their efficacy, and with the following result. The bleeding was controlled as soon as the ligatures were put on and firmly tied. But the withdrawal of blood to the extremities gave rise to the most distressing headache, throbbing in the carotids and temporal arteries, palpitation of the heart, *tinnitus aurium*, and a sensation of lightness about the head which felt, she says, as if it were twice its natural size. These feelings were replaced in a short time by syncope, and then the ties were removed. We must attribute the effects which hæmostasis occasioned in this case to the withdrawal of blood to the extremities, in consequence of which the central circulation was deprived of its normal quantity of circulating fluid, and the ordinary symptoms of anæmia were thereby induced. The applications of ligatures in this case invariably checked the flow of blood, gave time for coagula to form in the bleeding vessels, and for styptics locally applied to act where they had before been useless.

Cases illustrating the effects of Hæmostasis in membranous inflammations.

CASE VI.—Mrs. B., having been engaged for a week previous, nursing a sick child, which had caused her to lose much rest,

was taken with a severe chill, succeeded by great prostration of the nervous system, headache, pain in the abdomen, sick-stomach, and almost constant discharges of bloody mucous from the bowels, accompanied with the most distressing tormina and tenesmus.—These symptoms had lasted for two days when I visited her.—She had great heat of skin, tenderness over the abdomen, much thirst, and a pulse small and frequent. Took from fifteen to twenty ounces of blood, and ordered a solution of sulph. magnes.

℥j and antim. tart. gr. j to a quart of water, to be given as a drink until the feculent contents of the bowels should be freely discharged, and that a full anodyne should then be given. On visiting her the next day, I learned that she had had the evening previous five copious discharges, which were free from blood and mucus; that she had slept well all night under the influence of the anodyne, but that in the morning the pain in the abdomen had returned. She could not tell how often she had been on the close stool since morning—upwards of twenty times. She had flushed face, great heat of skin, pulse small and corded, 120 beats in a minute, and sick stomach after taking drink. Directed her sister, a strong muscular woman, to tie a handkerchief firmly about the upper part of each thigh; we then put ligatures around both arms just at the insertion of the deltoid muscles. The ties were scarcely applied when the colour left her cheeks, she complained of ringing in the ears, that the room was dark, and made an effort to vomit. The thighs became the color of a boiled lobster, the arms which were more tightly bound were of a livid red, the skin became relaxed, perspiration stood in drops upon her face, and in twenty minutes the pulse was reduced from 120 to 90 beats in the minute, besides having lost the small and corded character it had before the ties were applied. Directed the attendant to give her no medicine and to do nothing but manage the remaining ties, which were to be left on the thighs as long as she could bear them. If she fainted, I directed that they should loosen one handkerchief and allow the other to remain. 15th., Found the patient much better. One of the bands was taken off, an hour after my visit the day previous, the other remained on for eight hours and was removed on account of a sense of severe pain and ting-

ling in the limb. They had, however, tightened the handkerchiefs several times during the night, and both were firmly applied at the time of my visit. She has had only four mucous discharges since yesterday, her skin is moist, pulse 82, soft and open, some tenderness over the abdomen. Ordered pulv. nux vomica xxx grs. in six papers, one every 4 hours, and the handkerchiefs to be applied at intervals, and removed whenever she became very faint. 16th., She has had a tolerably good night. Five mucous discharges since yesterday without much pain or tenesmus, tongue moist having no recently secreted lymph upon it; abdomen soft and without tenderness to pressure, pulse 85 and soft. Ordered the ties to be applied as long as she could bear them, arrow-root in small quantity as a drink, and no medicine to be given.

17th., Patient much better, has had only three discharges since yesterday, feculent in character and having in them a few shreds of concrete mucous; pulse 80, tongue cleaning. Ordered the continuance of the arrow-root as a drink, and the bandages to be applied if the dejections became frequent.

18th., She is perfectly convalescent.

CASE VII.—A child aged 14, daughter of the lady whose case we have just stated, was also treated for inflammatory dysentery: she has had for some days past loss of appetite, and small, slimy discharges from the bowels.

15th., She had a slight chill yesterday evening succeeded by head-ache, pain in the back and flushed face. There is considerable tenderness from slight pressure over the abdomen, and great heat of skin; her pulse is small and corded, and she has constant tormina and tenesmus. The dejections resemble the white of egg, are streaked with blood, and have a faint sickening odour like that of the bruised leaves, or flower of the May apple—*Podophyllum peltatum*. Took from the arm 8 ℥ of blood, more or less, and ordered sulph. magnes. ℥ j and tart. ant. i gr. to a quart of water: of this half a tumbler to be given every two hours; to be followed by viij m of black drop, so soon as the feculent contents of the bowels should be freely discharged.

16th., Patient is much better; she had four copious feculent and watery dejections, after which, the anodyne was given, and un-

der its influence she had slept six or eight hours during the night. She has some pain about the umbilicus and slight tenesmus, but no mucous has been discharged since yesterday. Her skin is dry and pulse a little feverish. Ordered a warm fomentation to the abdomen, pediluvium, and barley-water as a drink.

17th., Slight increase of fever, dryness and heat of skin, return of mucous discharges mingled with blood, has had eight dejections in all, increase of pain in the abdomen, with constant tenesmus and more tenderness on pressure. Tied handkerchiefs about the upper part of each arm and thigh, which produced in five minutes, the most perfect relaxation of skin and softness of pulse; the face, which had been flushed, became pale, and the little patient was taken with hiccough and sick stomach. The skin of the arms and legs, below the bandages, had its capillaries so engorged that it bore somewhat the appearance it presents in scarlet fever. I then removed the ties from the arms, and directed that those on the thighs should be kept on as long as she could bear them with comfort: barley-water to be given in small quantities.

18th., Patient much better; she has had three feculent discharges since yesterday, mingled with some blood and mucous resembling boiled albumen. Directed the barley-water to be continued as a drink and the bandages to be applied at intervals. I have not seen this patient since, but have learned that she did well.

Hæmostasis in Engorgement of Parenchymatous Organs.

CASE VIII.—C. P., a negro chamber-maid aged 23, of robust frame and tall stature, whose parents are living and in good health, never remembers to have been sick until now. Having been the night previous to her attack in a hot, close and crowded room, she came home without sufficient clothing, through a damp and cold atmosphere. The next morning she was taken with a chill, which she says was an icy coldness over the whole body, without shivering. It lasted most of the day and was succeeded at night, by aching and soreness in all her limbs, violent pain in the back and severe head-ache.

24th., The day after her chill, I saw her for the first time: pulse 80, soft and natural, feet and hands cool, more heat about the head and neck than natural, skin dry, tongue moist, respiration

a little hurried, and much thirst, which when indulged by taking cold water, gives rise to a chilly sensation: She complains of great weakness, violent head-ache on making the least exertion, and universal soreness of the limbs. She has slight cough and no expectoration. The respiration on the right side, slightly puerile, and on the left shrillness and sharpness of bronchial respiration, as if the air were passing through metallic tubes, loudness and increased expansion of the vesicular murmur in the lower third of the lung. Took blood to 15 $\frac{3}{4}$ more or less and ordered a purgative.

25th., Has had no sleep, less soreness in the muscles, great prostration, head-ache, increased heat of skin, hands and feet hot and dry, tongue frosted, expectoration viscid, frothy, the color of tobacco-juice and slightly streaked with blood. Applying the ear revealed the fine crepitation of pneumonia occupying the lower third of the left lung, slight bronchophony and bronchial respiration. Took 12 $\frac{3}{4}$ of blood, the patient being in a perfectly recumbent posture at the time, and ordered tart. antim. et potass., iv grs. gum acacia \mathfrak{D} i, water $\frac{3}{4}$ i, of this from twenty to forty drops every two hours according to the degree of sickness it occasions.

26th., Has slept none, tongue white and dry, pulse 120 and corded, expression of countenance bad, looking sodden, with dulness about the eyes, the blood drawn yesterday is very much buffed, the fibrinous coating being about a line and a half in thickness on a clot of blood about an inch in depth, great precipitation of red globules and the ordinary quantity of serum. The bowl had been kept in a cool room. No vesicular murmur is heard over the lower third of the left lung, over which region there is great dulness of sound under percussion; the fine crisp crepitation of pneumonia is heard as high as the spine of the scapula, marked bronchial respiration and bronchophony; respiration puerile on the right side. She has slight dyspnoea and complains of great weakness after sitting up. Took 10 $\frac{3}{4}$ of blood, more or less, from the arm, ordered the dose of antimony to be increased and a powder containing sub. mur. hydr. and ipecacuan. $\acute{a}\acute{a}$ ij grs. to be given every 4 hours.

27th., She has slept none, expression of face exceedingly anx-

ious, complete dulness over the lower half of the left lung behind, fine crepitation at every other part of it except at a point directly beneath the clavicle: bronchophony and bronchial respiration very marked; the last blood taken is highly buffed. Medicine to be continued.

28th., More dulness on the left side, a course rhonchus and absence of vesicular murmur over the lower half of the lung; patient too weak to sit up in bed. The general appearances of the case indicate a fatal result. Ordered the medicine to be continued and ligatures to be applied to the upper part of each thigh.—As soon as the ties are fastened, the patient complains of feeling weak and sick at her stomach, the skin about the head and trunk is very much relaxed and the pulse much softer and less frequent. One hour after the ties were put on, she complained of a painful sense of numbness in both legs, the vessels of which were very much gorged with blood; directed the ligatures to be kept on, all medicine to be discontinued and the barley-water to be given in small quantities.

29th., The ties had been kept on for 12 hours, when removed, the patient had slept for three hours, the first time since she went to bed: the pulse is soft, 100 in the minute; tongue moist, skin soft and open, expression of countenance cheerful, eye more brilliant, expresses herself as feeling much better; the upper half of the left lung is free from the fine crepitation which was so distinct yesterday, less bronchial respiration; a subcrepitant râle and an occasional rhonchus is heard in the upper half of the lung. Ordered the bandages to be applied a second time and to be kept on until they became painful.

30th., She is much better, has more cough than she has had at any time, expectoration more copious: at the upper part of the lower half of the lung, which yesterday indicated the second stage of pneumonia, a moist subcrepitant râle is heard.

1st., The bandage had been kept on 14 hours, producing slight œdema of the lower extremities, below the point at which they were tied. There is much less dulness over the upper portion of the lower third of the lung behind, at which point a soft mu-

cous râle is heard. Ordered the drinks to be given in moderation and saw that the handkerchiefs were firmly tied.

2d., No dulness except at the very base of the lung above which point a soft subcrepitant râle and an occasional rhonchus are distinctly heard; the tubar sound is feeble and there is much less resonance of the voice. Directed that the handkerchiefs should be re-applied.

3d., *Hæmostasis* to the lower extremities does not produce the symptoms of syncope which it occasioned when applied the first time, it serves however to depress the pulse and keep the skin relaxed. She slept well all night and expectorated about a gill of mucous on waking; subcrepitant râle is heard at the very base of the lung, and an occasional rhonchus when she takes a deep inspiration. Ordered the ties to be applied at intervals.

5th., She is perfectly convalescent.

CASE 9.—M. L., aged 28, a native of Brazil, has been leading a pretty active life until now, three days ago he came to Baltimore, having at the time a slight catarrh which he had contracted a week previous. He is moderately muscular and of a nervous temperament; the conformation of his frame is good; but he stoops a little in his gait and crouches his shoulders on his breast.

4th., Yesterday he was much fatigued by exercise and a good deal exposed to the coldness of the day. At night he came home feeling chilly; this sense of coldness was increased when he approached the fire. With a hope that he would be relieved by stimulus he forced himself to eat a supper at which he took some alcoholic drink. He went to bed at an early hour complaining of head-ache, was restless the whole night owing to severe pain in the head, occasional nausea, and a feverish feeling. He has some cough, heat about the head, dry skin, tenderness over the epigastrium, pain extending from the xiphoid cartilage in the direction of each shoulder as high as the fourth rib, and a sense of dryness about the throat with some soreness. The conjunctiva is slightly injected, the tongue white, and pulse 95. His bowels were opened yesterday. Gave a tumbler of warm salt and water, which relieved him of the supper he had taken the night previous,

and ordered an ounce of tart. potass. et soda, which the stomach instantly rejected; directed a sinapism to the abdomen, the Rochelle salt to be repeated, and to be followed by a Seidlitz-powder every four hours. Evening—he has had six dejections from the bowels, has increased heat of skin, more tenderness over the abdomen, tongue very white, and a pulse 100 in a minute. He would not consent to be bled. Ordered cups to the epigastrium and bi carb. soda and chlor. potass. á. á. gr. v. to be given every three hours.

5th., He has constant sick stomach which is intolerant to every thing, rejecting instantly a few drops of cold water; intense thirst, heat and dryness of skin, a great sense of burning about the fauces, increase of pain in the walls of his chest, and tongue very much frosted. Took from his arm a basin of blood, about $\frac{3}{4}$ xxv, more or less, which produced the most complete syncope, ordered hydrocyanic acid *m* xx. in $\frac{3}{4}$ ij of water, of this gtt. x. every two hours, and ice-water as a drink. Noon—pulse 120 and much softer, expectoration viscid, seems to come chiefly from the fauces, respiration every where natural with the exception of an occasional rhoncus similar to that heard in many cases of typhoid fever, and increase of pain extending along the walls of the chest in front. Continued medicine and ice-water as a drink.

6th., Has slept none, pulse 110, less sick stomach, great thirst, some heat of skin; wanted him cupped which he protested against. Ordered the common effervescing draught every two hours and as much ice-water as he desired.

Noon.—Symptoms the same. Ordered six cups to the epigastrium and rice-water as a drink.

Evening.—Has had a very restless day, stomach very irritable, rejecting every thing, complains of great burning about the fauces extending down the gullet, great heat of skin, pulse 135, sharp and corded, some tenderness over the epigastrium. He is very restless and impatient, complains of head-ache, tosses about in bed and says that he is on fire. Applied hæmostasis to all the extremities. In five minutes the skin is bathed in a profuse perspiration and in a few minutes more, all the phenomena of

syncope came on; the tongue which was hot and dry, is now quite moist and the pulse reduced to a mere thread; obliged to take the pillow and bolster from beneath his head; his muscular system is as much relaxed as it could possibly be from any dose of antimony given to a healthy man. The syncope is now so distressing, his voice having been inarticulate for more than fifteen minutes, that it was necessary to loosen the ties on the upper extremities which partially relieves the syncope. A highly intelligent bystander was so much struck with the singular effects of tying the extremities in this case, that he begged me to explain to him its mode of operation. The syncope became so distressing at the termination of an hour, and the bed-clothes were becoming so changed with perspiration that the ties were removed. In a few minutes the faintness began to be relieved and in twenty minutes all the symptoms of syncope had vanished. Ordered warm barley-water as a drink during the night, and the prussic acid to be given if the stomach became sick.

7th., Has slept well during the night, probably five hours; no heat of skin, tongue moist, some tenderness at the epigastrium, pulse 85, soft and compressible, but a little quick in its beats.—Ordered the ties to be applied to the lower extremities and to be loosened if they produced very distressing faintness, and barley-water to be given in small quantities.

Evening.—The ties had remained on about twenty minutes causing him to perspire so freely, that he had insisted upon taking off a thick flannel shirt with long sleeves, which he had worn previous to and during his sickness. The attendant had foolishly permitted him to lie without sufficient clothing and at his request allowed the fire to go down. He now complains of feeling chilly and has cold hands and feet. Room to be kept warm and some warm drink given him.

8th., Has had a bad night. The sense of chilliness had lasted for some hours and fever had succeeded it: no tenderness over the epigastrium, pulse 105 and some heat of skin. Drink to be continued, and the powders of soda and potash to be reserved.—At noon received a message saying that he is in severe pain and begging me to see him as soon as possible. Find him complain-

ing of severe pain in the right side extending in the direction of the ninth rib; the fine crepitation of pneumonia is heard over the middle two-thirds of the right lung behind; vesicular murmur in the rest of the lung very feeble; some bronchophony and slight tubar respiration; breathing hurried and pulse 130, quick and corded. These symptoms surprised me, for I never suspected the existence of a pneumonia; and believed until now, that I had been treating one of the few cases of acute gastritis that have ever come under my notice. Attracted by the cough I had examined the lungs carefully every day for the three first, and could discover no sound except an occasional rhonchus in both lungs. Has there been a central pneumonia in this case from the beginning, or was it ushered in by the exposure and consequent chill of yesterday? Up to this time, there have been no general symptoms indicating such a disease, auscultation revealed no sign of it, the expectoration has not been characteristic of engorgement of the lungs, and besides the stomach could not have been under the existence of a pneumonia, so intolerant of every thing which it took. I believe then that the pneumonia which now exists must have resulted from the chill of yesterday. Took from 12 to 15 ʒ of blood from the arm, which produced syncope, the patient being in a half-recumbent posture at the time; and ordered viij grs. tart. antim. to water ʒ i, of this from 20 to 60 drops every 2 hours.

Evening.—The most perfect toleration to the antimony established, skin dry and hot, pulse 135, tongue white, expectoration bloody, viscid and frothy; tubular respiration and bronchophony more distinct, severe pain in the side, when he attempts to take a long breath. Ordered ties to be applied to the lower extremities and to be kept on for some hours, and sub. mur. hydr.—pulv. ipecacuanha áá ʒ i—nit. potass ʒ ss. into xij parts—one to be given every three hours when the ties are removed.

9th., Partial syncope had been kept up for six hours by means of the ties, after which he had slept for two hours; no blood in the expectoration, skin moist, pulse one hundred, slight pain in the side, expresses himself much better; when he sits up, ægophony is distinctly heard at the base of the right lung, there is

perfect dulness at the point where the bleating is heard, bronchial respiration and bronchophony very distinct; when he lies on his left side the bleating voice is lost, owing to displacement of the fluid, but the bronchophony and tubar respiration are quite as distinct. We have here then a pleuro-pneumonia. Ordered the ties to be kept on at intervals during the day, drink to be sparingly given and the medicine to be continued.

Evening.—*Hæmostasis* has been kept up for some hours, resonance of the voice very distinct, bleating the same, skin moist, pulse 90, has had three stools.

10th., Absence of sound over the middle of the lung behind, tubular respiration blowing, ægophony very distinct at the base of the lung. Tied handkerchiefs about the arms and thighs which produced syncope in three minutes; allowed the faintness to continue for about half an hour, when the ligatures were removed.

Evening.—Symptoms better, three dejections from the bowels. Directed that the ligatures should be steadily applied and all medicine laid aside.

11th., Has slept well during the night, expectoration more mucous, skin dry, pulse 90 and soft. Ordered the ties to be applied at intervals.

12th., Fine crepitation, mingled with subcrepitant râle, is heard at the very base of the lung behind; skin soft, pulse 85, bronchial respiration and bronchophony very audible, bleating same as yesterday. Drinks to be given in moderation, and hæmostasis to be applied to one or two extremities at a time during most of the day.

13th., He slept tolerably well last night. Vesicular murmur mingled with a moist crepitation is heard over a space of about two square inches at the very base of the lung behind. Dulness over the middle two-thirds of the lung extending downwards and forwards to the anterior third of the ninth rib. Resonance of the voice very distinct from the centre of the scapula downwards across the axillary space to the base of the lung, at which point the bronchophony and bronchial respiration partake of the bleating sound—this ægophony is now unchanged when he lies on his left side. Copious mucous and frothy expectoration, skin moist,

pulse 90. Directed the handkerchiefs to be applied whenever the skin became dry, and the powders of nitre and ipecac. to be resumed.

14th., He has had a restless night, having been distressed very much by the action of the medicine, which gave rise to the most painful tenesmus. Symptoms, general and local, very much as yesterday except that he complains of great weakness. Ordered the medicine to be discontinued, and hæmostasis to be applied to the extent of keeping him constantly nauseated; if syncope came on, I directed that one or more of the ties should be loosened.

15th., Vesicular murmur can be heard over a greater space at the base of the lung; less tubar respiration, and resonance of the voice not so distinct as yesterday. Skin moist, pulse 85, expectoration more mucous. Has slept most of the night. The ties to be applied at intervals.

16th., Patient has had a good night. The expectoration is very copious, and sub-crepitant râle is heard at points where yesterday it was entirely absent.

17th., General symptoms and local signs indicate improvement.

19th., Sub-crepitant râle and vesicular murmur are now heard over the middle third of the lung; slight resonance of the voice from the middle of the scapula downwards and forwards to the base of the lung.

23d., Patient perfectly convalescent. Hæmostasis has been regularly applied until now:

CASE X.—Madame W., æt. 38, of delicate constitution and anemic in her appearance; has suffered for two years with chronic metritis, which commenced about three weeks after the birth of her last child. Having been taken with chill she sent for me to prescribe for the first time in her case. On my arrival the chill had gone and also the fever which succeeded it; she was in a profuse sweat, had a severe pain in the small of her back, headache, and slight acceleration of pulse. I supposed at once that this was a paroxysm of intermittent fever; but as objections existed to the use of quinine, it was not given to prevent the ex-

pected return of chill. Two days after was sent for again about the same hour, found that she had had a second chill, the chief difficulty resulting from which was acute pain and burning about the region of the uterus, which was remarkably sensitive to pressure; she had also severe head-ache, pain in the back, heat of skin and flushed face. Directed an attendant to tie a handkerchief firmly about the upper part of each thigh. In five minutes the skin was relaxed, profuse perspiration came on, and the burning pain in the uterus was relieved. Anticipating the next chill gave of quinine gr. x. which prevented the return of the paroxysm. A week afterwards put her on treatment to relieve the metritis, which occasioned, from the least fatigue, a feeling of exhaustion, a dragging sense of pain in the lumbar region, irritable bladder, and after much exercise, severe pain in the back and head-ache; these latter symptoms beautifully illustrating Marshall Hall's doctrine of reflex action. In this way she has suffered for the last two years, rendering her unable to attend to her household affairs. There is a constant copious discharge of whitish secretion from the vagina, the color of which varies to a pale yellow; neck of the womb of a deep scarlet, except at points where the mucous surface is ulcerated, and its lips broad and very tumid. Directed rest in a recumbent posture as the most important thing to be observed, light farinaceous diet, and the bowels, which have been constipated, to be kept open by the use of Seidlitz-powders or Rochelle salt. Four days after touched the ulcers with lunar caustic; lips of the womb still very red and tumid. Directed her attendant to apply handkerchiefs tightly about the upper part of each thigh for several hours daily, loosening or tightening them according to circumstances. Ten days having elapsed the uterus is scarcely sensitive to pressure, neck of the womb considerably reduced in size, and natural, or nearly so, in color. Retouched two ulcers, the rest having cicatrised. Told her to take moderate exercise in a carriage, and each night to apply the bandages for an hour or two before bed-time. Two weeks after I find that the ties have been regularly applied, and that she has rested in a recumbent posture during most of each day. She can now take exercise without inconvenience, and the symptoms of the disease

have vanished. We should have observed that in the above case the menstrual function of the uterus was at no time affected.

CASE XI.—Mrs. G., of moderately good constitution, having aborted five weeks since, and having yesterday sate with her back against a damp wall, was taken with a slight engorgement of the womb and acute ovaritis of the right side, which were ushered in with a severe chill succeeded by sharp fever. On touching the mouth of the womb she complains most bitterly, screaming out from the slightest pressure. Ordered ten leeches to be applied to *cervix uteri*, and a dose of magnesia to be given. The application of the leeches was followed by relief for twelve hours. The pain returned next day with increase of fever. She objected so strongly to the mode of leeching adopted the day previous that I ordered cups in their place. Accordingly, 3 x. of blood were taken from right hypogastric region which afforded great, but not entire relief, the patient still complaining of much sensibility to pressure. Next day found her sitting up in bed flexing the thighs upon the trunk. This had been her position during the greater part of the night. She has slight fever and an acute lancinating pain in the right hypogastrium. Directed handkerchiefs to be tightly applied about the upper part of each thigh. In a short time tingling of the limbs and pain came on with great fullness of the veins, sick stomach, profuse diaphoresis, slight vertigo, and tinnitus aurium. Bandages were kept on for eight hours and with the happiest effects. Two hours after the removal, slight pain returning, she ordered them of her own accord to be put on again. At my next visit found her lying down, the pain entirely gone, slight tenderness to pressure, but no fever.—The ties have been applied at intervals for ten days, at each time with marked advantage. She is now, thirteen days from the date of her attack, entirely relieved.

Hæmostasis in simple venous congestion.

H., aged 22, of moderately robust habit, having just returned from Bush river, where he had been engaged in shooting for a week previous, was taken with a slight rigor succeeded by some fever.

Sept. 16th., Visited him and prescribed some light aperient

medicine. The next morning, having passed a good night, he was well until the hour of the chill had made its appearance the day preceding, when fever came on accompanied with head-ache, pain in the back, and great weakness. He has flushed face and a quick, frequent and feeble pulse. These symptoms associated with those of yesterday seem to indicate the remitting bilious fever. Accordingly we directed of quinine gr. j. to be given every two hours as soon as the paroxysm subsided. The symptoms increasing during the day we were sent for and found him at nine o'clock suffering from the most distressing dyspnœa, and severe head-ache. Took of blood z viij , more or less, from the arm, and ordered a pediluvium. To relieve intense thirst directed for him the common effervescing draught, and reordered the quinine during the remission which was expected to occur the next day.

18th., In the morning entire absence of fever, but in the evening find that the quinine has not prevented the paroxysm. He has flushed face, great heat of skin, intense head-ache, and severe dyspnœa, almost threatening suffocation. Applied handkerchiefs to the upper and lower extremities with entire relief to the dyspnœa, which was succeeded by relaxation of the skin, and in ten minutes after the adjustment of the ties, the face was quite pale and the cephalalgia relieved. Removed the bandages from the arms, and directed of quinine z j , acid. sulph. dil. *mij*, aqua distil. z ij —of this two tea spoonsfull every hour during the remission of the fever.

19th., At seven in the evening he had taken the whole of the quinine which prevented entirely the expected paroxysm. Temperature of the skin natural, pulse good. The quinine has rendered him very deaf, and he complains of *tinnitus aurium*. This patient recovered without further treatment. In this case the effect of hæmostasis was perfect in relieving the dyspnœa occasioned by congestion in the lungs, and in cutting short the paroxysm of fever.

Many of the foregoing cases have been stated in detail, for the purpose of affording the reader a definite and precise idea of the circumstances under which the ligatures were applied.

REMARKS.—It was stated in the beginning of this article, that the effects of hæmostasis are always in a direct ratio to the quantity of the circulating fluid, and the correctness of this position was explained by reference to a simple physical example : in confirmation of its truth, the reader's attention is now called to Cases I. and II. These were selected for illustration, because we thought they would furnish the reader, a more accurate and familiar idea of the exact amount of blood lost, and of the conditions under which it was taken, than any other analogous cases could have afforded. In both instances the individuals were of middle stature, with veins of medium development, had a normal quantity of blood in the circulation at the time the trials were made, and neither of them fainted from the direct effect of hæmostasis, when first applied to all the extremities: when however a certain quantity of blood, varying in the two instances had been drawn, by which the central circulation was deprived of a very small quantity of blood, syncope came on. After the ties were removed, one of these individuals lost a considerable amount of blood without the occurrence of syncope; the other fainted, but not until many ounces of fluid had been withdrawn. And when the ties were again applied, both of them fainted outright. It being established then, that the effects of hæmostasis are in every instance dependant on the quantity of fluid in the circulation, attention is now called to two other conditions, which must modify its influence in producing syncope.

1st., The length of the extremities.

2d., The size of the veins of the peripheral or extreme circulation.

The height of the body depends generally, not upon the length of the trunk, but on that of the extremities; while therefore the central circulation in every individual remains nearly the same, the extent of the extreme vessels is constantly varying: consequently, in one individual the capacity of the veins of the extremities must be small, and in another large in proportion to that of the trunk, and the effects of applying ties must be correspondingly greater or less. When venesection has to be performed, it not unfrequently happens, that the veins of the extremities are so small,

that great trouble is often required, to find one of sufficient size, from which to let blood. While on the other hand the extreme veins are sometimes found enormously developed. The quantity of blood which can be transferred from the central circulation, must of course depend on the size of the extreme vessels and the amount of fluid they are capable of holding. For example, in Case III., the individual was over six feet in height, the veins were larger and more developed than usual, and the circulation appeared to have the degree of repletion which belongs to health. In this instance, syncope was induced from the direct effect of the ties, and without the previous loss of a single drop of blood.—The result here, was doubtless owing to the length of the limbs and the unusual development of the extreme veins.

Preparatory to excising a scirrhus mamma, ties were firmly applied to all the extremities, which reduced the pulse to a mere thread. The operation was then commenced by making two elliptical incisions, extending from the upper part of the third to the sixth rib; from these about an ounce of blood trickled down the walls of the chest and was caught in a sponge. In the course of the operation, which lasted about ten minutes, I found it necessary to sacrifice a large portion of the pectoralis major, and when the knife was laid aside, the fourth rib was bare to the extent of an inch and a half. No blood was lost during the course of the operation, except that which flowed from the two first incisions. The ties on the extremities were now loosened for the purpose of finding the divided vessels, and in a little while a jet of blood was found to issue from two of the principal arteries, about which ligatures were quickly put. Torsion was applied to the smaller branches, and the capillary oozing stopped by the use of an astringent. In this operation the chief ramifications of the external and internal mammary arteries were divided and the quantity of blood lost could not in all, have exceeded two ounces. We have often applied ligatures to check hæmoptysis and epistaxis, and in every instance with success, but as these hæmorrhages are likely to stop at any time without interference, we considered these trials as unfair tests of the effects of hæmostasis and unworthy of special notice.

In Case VIII. it is observed, that the effects of arresting the venous circulation were much more marked at first, than they proved to be from subsequent applications of the ties. This was doubtless owing to the fact that at first, hæmostasis was adopted soon after the loss of blood from the arm, at which time, the vessels were more empty than they were at subsequent trials, the circulation having been in the interval replenished by drinks.* In every instance therefore, in which it is desirable to produce the full effects of hæmostasis, fluids should be sparingly given to the patients.

From the physiological changes which were observed to take place, from arresting the venous circulation in Cases VI. and VII., it is fair to conclude, that the use of the ligatures contributed largely in cutting short morbid action, and in bringing about a state of convalescence.

In Cases VIII. and IX., the withdrawal of blood to the extremities, was practised at a time, when the condition of the patients was of the gravest character, and when in one of them, perfect toleration to the action of antimony was established. Most writers agree that the beneficial effects of blood-letting in acute disease, are mainly attributable, not so much to the quantity of blood drawn, as to the syncope which the loss of it induces.—The correctness of this opinion, no one can doubt, who has witnessed the disgorging of the vessels of a recently inflamed part, in consequence of induced syncope from loss of blood: notwithstanding the opinion of Bouillaud and others to the contrary.

During the short period of syncope which succeeds venesection, the vessels of a recently inflamed part may—the force with which the blood is sent to them being cut off—resume their natural calibre; but when the inflammation has existed for a greater length of time, so as to disable the capillaries, and these have laboured under protracted engorgement, by which the inherent vital contractility of their coats is weakened, the ordinary duration of syncope is insufficient to enable them to gather up and discharge the abnormal quantity of contained blood. And besides this, if the engorgement have lasted long enough, the thinner portions of the blood are transfused into the interstitial tissue

*See Williams on the treatment of Catarrh.

and other changes take place. In this state of inflammation, how incalculable must be the importance of a means, which will protract syncope indefinitely, so that the afflux of blood may be cut off, further injection of the vessels prevented, and time given for the transfused fluids to be absorbed. And this too, in whatever part of the body the inflammation may be seated. In a case of acute articular rheumatism of the left elbow, for which the patient had been twice bled with little benefit, hæmostasis was applied to the arm of the opposite side, and to the two lower extremities, with great relief of pain and mitigation of the general symptoms. It is fair at least to infer, that in these cases hæmostasis contributed largely to the removal of the engorgement, and to the final recovery of the patients.

In Case XII., simple venous congestion of the lungs was speedily relieved by the application of ligatures. When blood is accumulated in the veins of the brain or lungs hæmostasis promises well, but as a means of removing congestions generally, its application is not likely to prove universal, and for obvious reasons. When hæmostasis is applied, the blood which accumulates in the extremities is derived of course through the arteries. If there be a morbid collection of fluid in the veins of the lungs, it has only to pass to the left side of the heart, and then to a point beyond the ligatures, where it will be retained. But if on the contrary, an abnormal quantity of blood should exist in the vena cava and its branches, or in the vena portarum, it would have to pass to the right side of the heart, then the round of the pulmonary circulation, afterwards to the left ventricle, and lastly to a point beyond the ligatures. And independently of this; if in congestion of the veins of the abdomen, ties were applied to the thighs, they would at once, as before explained, arrest half of that force which returns the blood through the vena cava back to the heart, and would consequently increase instead of diminish the stagnation of blood in the veins of the trunk. Detaining the blood in the extremities, anticipating a chill, by means of ligatures, and thereby preventing its accumulation in the spleen and portal vessels, may possibly delay a paroxysm of intermittent: but when blood has already accumulated in the

large veins of the abdomen, the adoption of hæmostasis would only augment the congestion.

It was stated in the commencement of this article, that pressure applied over the jugular veins will delay, and in some instances prevent syncope. Dr. Parry recommended compression of the carotids for the relief of nervous diseases. This suggestion appears to have excited at the time great attention.—I quote the language of Dr. Pring in regard to it—“More than thirty years ago, the attention of Dr. Parry was, I believe, first particularly directed to the importance of the circulation, by a case of hysteria, in which from an obvious determination of blood to the brain, he was induced to try the effect of pressure on the carotids, with a view of diminishing the quantity of blood sent to this viscus. The symptoms were diminished, or suspended during the compression of the carotids, and repeated subsequent experiments of the same kind led to the conclusion, that the cause of spasmodic disease proceeding from disorder of the brain, consisted in a determination of blood to this part.” Mention is again made of the suggestion in a letter to Dr. Parry from M. Baillie the author of the treatise on pathology. He says. “I saw Mrs. T. yesterday evening—I made the experiments which you had already tried. Upon compressing the carotid artery of the right side firmly, the involuntary motions of the fore-arm, arm, &c. were in a great measure checked, but were not at all affected by a similar pressure on the left carotid. This is certainly a strong proof of the truth of your opinion in this particular case.” It is exceedingly difficult to compress a carotid so as to cut off its circulation, and this cannot be done, without first arresting the flow of blood in the veins which lie over it. Parry believed that all nervous diseases depended upon an afflux of blood to the brain, he indeed originated the doctrine of local determination,* and blinded by this idea, it never occurred to him, that the relief derived might depend on compression of the veins, rather than the arteries of the neck. In a paroxysm of hysteria, congestion occurs in the lungs, giving rise to the distressing dyspnœa which so often accompanies an hysterical seizure, and the brain is deprived of its

*See Introduction to Dr. Parry's Posthumous Works by Charles Parry.

normal supply of blood. The relief which Dr. Parry and M. Baillie observed, was no doubt owing, not to the compression of the artery as they supposed, but to their having arrested the return-blood by the veins, by which means the normal quantity of circulating fluid was restored to the brain.

It is somewhat curious, that the means which are here proposed to induce syncope, should at one time have been used for the purpose of relieving it. An old and popular remedy for syncope, was to apply ligatures tightly around the limbs. The idea was that they impeded the flow of blood to the extremities. This practice has recently been alluded to by Mr. Wardrop, who countenances their employment, and endeavours to account for their influence on physiological principles.

My friend, Dr. Fonerden, ingeniously suggests that the object here desired, may be better accomplished, not by means of ligatures, but by bandaging the extremities continuously from the fingers and toes to the trunk, so as to drive the blood from the peripheral, or extreme, to the central-circulation. May not such a practice be adopted with advantage, where an individual has lost so much blood, that there is only enough left in his system to supply the organs essential to life—the heart, brain and lungs—and to the extremities of anemic women in protracted labor, where, owing to the pressure of the womb on the iliac veins, *nature's hæmostasis*—so much blood is cut off from the central-circulation as to deprive the brain of its normal supply, and thus rendering the pains weak, feeble and inefficient?

It has been stated in many Journals as a fact for which no explanation is offered, that raising the arm on the side from which the blood comes will arrest bleeding at the nose. That this may afford relief in mild cases, it is easy to conceive. When one arm is held perpendicularly upwards, the force of gravity accelerates the current of blood in the subclavian vein, which is now in a vertical direction; this rapid displacement of fluid, at the mouth of the jugulars, hurries the return-blood in them, and thus derives from the bleeding vessels of the nose.

Is the application of hæmostasis ever attended with danger, or is it likely to give rise to unpleasant consequences?

1., Where there is a normal condition of the heart, the syncope induced by the application of ligatures can never be fraught with danger. Instances are on record of individuals who have been in a state of absolute syncope for hours, and even days together, as in cases of *Lipothymia*, which are with difficulty distinguishable from death. Individuals laboring under organic affections of the heart, should never be made to faint outright. When a patient is in a state of induced syncope, from the application of ligatures, he ought never to be left without an attendant, who may, by loosening one or more of the ties, prevent the faintness from becoming too determined. Syncope, so far from being attended with danger, is to be regarded in the main, as a recuperative provision. In hæmorrhage from wounds, for example, syncope is one of nature's remedies for promoting the contraction of the bleeding vessels and the formation of a coagulum: the application of hæmostasis therefore, only assists one of nature's most powerful restorative efforts.

2., There is no danger of producing phlebitis, from stasis of the blood in the veins, unless the circulation be cut off, for a greater length of time, than the remedial application of the ties would ever require. Inflammation of the veins of the fore-arm, has been known to take place in consequence of too close an adjustment of the immoveable apparatus which had been applied for fracture of the humerus, but in this instance the circulation had been arrested for more than two days. Phlegmonous and erysipelatous inflammations have sometimes arisen as a consequence of applying the starch bandage, but these accidents only took place where their use had been long continued. The direct pressure of the ties cannot injure the coats of the vessels and thereby give rise to phlebitis; for in Sanson's method of curing varix far more force is applied, and yet serious inflammation of the vein has never been known to occur as a consequence.

3., The slight œdema of the lower extremities, which has been observed to take place in a few instances, is the only accident which has followed the application of ties to the limbs.—The production of œdema seems to be the mode by which kind nature provides against other accidents. When, for example,

thickening takes place in the cellular tissue, at the capsule of Glisson, the liver becomes hypertrophied, or atrophied as in cirrhosis of that organ,* the vena cava and porta are pressed upon and their circulation impeded. Under these circumstances, the serum of the blood is poured out into the cellular tissue every where, below the point of obstruction; this transfused fluid pressing upon the veins from without, prevents them from becoming over distended, guards against rupture of their walls and enables the return-circulation to overcome the impediment to its course. It is in a conservative principle of this kind, rather than in instances of direct design, that the goodness of the Creator is so distinctly marked. When therefore œdema of the limbs already exists, the adoption of hæmostasis is impracticable.

Physiologists have devoted their attention principally to the vital performances of organs in health alone, and pathologists have bestowed more observation, on the lesions which are to be found after death, than on the phenomena which marked their course during life. There is needed in medicine at the present day, a Linnæus or Cuvier, who shall,—with the facts furnished by physiology on the one hand, and by pathology on the other,—supply all the intermediate links, in the chain of modified vital acts, which occur during the course of disease.

In view of the serious consequences, which in many cases result from excessive loss of blood, it would be idle to insist on the importance of a mean, which will enable the practitioner to relieve acute disease, without the loss of that blood, which in the absence of it, he would be obliged to take. How frequently it happens, as a consequence of excessive loss of blood, that an individual falls into a state of cachexia, from which he slowly or never rallies.† It is of peculiar importance, to avoid much bleeding, in the aged and the debilitated, in whom the powers of assimilation are weak, and the elaboration of blood is slowly carried on. In treating the acute diseases of all such, the adoption of hæmostasis must prove a special benefit. Numerous instances are on record, of fifty and sixty ounces of blood having been

*See Carswell's *Path. Anat.*—article *Atrophy*.

†See Marshall Hall on *Loss of Blood*.

taken at a single bleeding; now had half the quantity been taken in each case, and had hæmostasis then been adopted, we have reason to believe that the farther loss of the vital fluid might have been spared.

Hæmostasis accomplishes what no other known remedy is capable of doing. It puts syncope under our control, both as to duration and degree. It is capable of exerting, under given conditions, a more powerful control over the circulation than the lancet, antimony, or digitalis, and controls the heart's action, without exhausting the vital forces, or giving rise to the ill consequences which the protracted use of most of the sedative agents is likely to do. And finally, hæmostasis, in the hands of judicious practitioners, must prove a means of saving an incalculable amount of human blood; to say nothing of the incredible benefits which would be derived from its adoption by those Sangrados of our art, who bleed empirically in all conditions, and who in many cases, like the fabled Vampire, suck the living current until the vital powers are spent.

ART. II.—*Remarks on the Vascular Nævus, with a New Mode of Treatment.* By N. R. SMITH, M.D., Professor of Surgery in the University of Maryland.

THIS species of Anuerism by anastomosis, generally present at birth, is usually observed to increase rapidly after being first noticed. The great vascularity of the skin, in early infancy, is favourable to its rapid development. Its growth is especially rapid when located on the head, face, neck, or chest, the circulation being relatively more active in these regions. The disease is not always properly termed a nævus, inasmuch as occasionally the texture of the skin is not involved in the vascular hypertrophy. The cellular tissue below the skin is then its seat; and, indeed, in all cases, in which the disease is considerable, it expands beneath the skin to some extent.

There are also nævi which are not aneurisms. There is the brown nævus, usually covered with pile or stiff hairs, in which

the skin is thickened, but not preternaturally vascular. There is also the claret-coloured spot, often very broad.

The rapid increase of the vascular nævus in infancy generally alarms the parent, and prompts her to seek surgical aid.—The same circumstance, together with the apprehension of hemorrhage, induces the surgeon, in many instances, to extirpate the disease with the knife.

If my opinion be founded upon my own observation of this disease, I should pronounce it less formidable than it is generally believed to be. The disease, it is true, may manifestly increase at first, but I have seen a great many instances in which it has, after a time, ceased to grow, then has faded, withered, wasted, and totally disappeared, without the employment of any remedies which may be supposed to have exerted any influence upon its progress. Even where a mark has remained in the skin, the aneurismal character has often totally disappeared. A majority of these tumours I have not seen to increase after the third year. I doubt not, that many of the remedies to which efficacy has been ascribed in the treatment of the malady, have acquired their reputation in consequence of their having been employed about the period of its spontaneous declension.

Much apprehension is commonly entertained in regard to serious or fatal hemorrhage from the increasing vascular nævus.—Instances of death from incontrollable bleeding are, it is true, on record. Among the great number of cases which have fallen under my notice, such an event has, however, never occurred.—I have never encountered any difficulty in restraining the effusion of blood from them, however it may have been produced. The existence of an aneurism by anastomosis, by no means implies that state of the blood, and of the vessels generally, which constitutes the hemorrhagic diathesis.

If my observations are correct, the character of the disease does not always justify the severe means occasionally resorted to in its treatment. When the disease occurs on the back, back of the neck, or shoulders, I rarely deem it necessary to perform any operation upon the tumour, or indeed to meddle with it. These

regions are less vascular than others, and in them the disease may be expected, in almost all cases, to disappear spontaneously.

When the disease is located on the face, neck, or head, there is less probability of its disappearance, and as the deformity here caused by it is to be deprecated, we are justified in the use of remedies even somewhat severe.

It is not my object, in this paper, to give a history of the various means which have been resorted to, but merely to present the results of my own experience.

Mechanical pressure has, with me, except in a single case, accomplished nothing. It is exceedingly difficult to maintain it on children, with uniformity. If it causes irritation it often produces the very opposite result to that sought, vascular excitement being induced.

Styptic applications have proved equally inefficacious, whether mineral or vegetable. I have tried the oil of ergot without effect.

Vaccination I have never tried, but have often treated cases in which it had been resorted to without effect. I have no faith in it except in cases of trivial magnitude.

The twisted suture, so much vaunted, of late, in the Medical Journals, I have repeatedly resorted to. In one case in which I employed it, the disease was truly formidable, though located on the back part of the shoulder and neck, in a little girl of two years from the city of Washington. The disease was wholly beneath the skin, and, in form, presented the appearance of two hemispheres, of the size and form of the halves of an orange, presenting their convex surfaces side by side. A branch of the transverse cervical artery could be felt much enlarged, passing over the clavicle to enter the tumour. A very large and varicose vein could be seen returning its blood in the same direction, and communicating freely with the large veins of the neck. When the child cried, this vein, just below the clavicle, in front, became enormously distended.

Pressure having been used in this case without effect, I resolved to attack it with needles and the ligature. I transfixed its base with three long and slender needles, and around the extremities of these I twisted threads, so as partially, to strangulate

nearly the whole of the vascular mass. The tumour was at once greatly reduced in volume. On the second day after the operation, the child suffered a chill with febrile re-action. The stomach became irritable and the patient sunk into a comatose condition. I immediately removed the needles and ligatures. Unpleasant symptoms, however, marked the case for two or three days, caused in my opinion, by inflammation of the blood-vessels of the part—veins, perhaps, more especially. They, however, at length disappeared after causing great solicitude in my mind, and leaving me resolved never again to inflict such serious irritation upon tumours composed of such large and numerous vessels. While the child was ill—while it was languid and pallid, the tumour had greatly subsided; but as it recovered, its vascular fulness in a great measure returned. I now applied a well adapted apparatus for compression, made of elastic bands, which acted with great effect. The disease began from this moment to decline. Was this the result of the ligation? or was it the result of nature's efforts? or did the well-adapted compression effect the object? The parents were persuaded that the declension of the disease was dated from the time of the operation. The tumour is now so nearly conquered that it causes no solicitude.

I have used the same means in several cases in which the disease had less volume,—in two in which it was located on the face and nose. In one of these there arose unpleasant constitutional symptoms. In neither was I satisfied that any decided benefit resulted from the operation.

I have often extirpated these tumours with the knife; and when they are located upon the face, head, or neck, the operation is often preferable to any other expedient. It is of the utmost importance, in making the incisions, to cut exteriorly to the vascular tissue, on every side; for to cut into the tumour causes a most copious gush of blood.

There is a method, however, which I have recently devised which I shall resort to in a majority of cases in which it is deemed necessary to interfere. I saturate a thread with the strongest possible solution of caustic potassa. This I dry by a fire and

arm a needle with it. I transfix the base of the tumour with the needle and gently draw the thread through the part. This I repeat in different parts of the tumour. I have now a case under treatment in which by these means the tumour is rapidly wasting. The agent has caused no distressing symptoms, though slight suppuration and the issue of a little blood. Its *modus operandi* is sufficiently obvious.

Review.

Homœopathy and its Kindred Delusions; Two Lectures delivered before the Boston Society for the Diffusion of Useful Knowledge. By OLIVER WENDELL HOLMES, M.D. Boston, Wm. D. Ticknor. pp. 72.

DR. HOLMES seems to have spared no pains in making himself perfectly acquainted with the origin, progress, and present decline of homœopathy. So thorough indeed has been his investigation of this pseudo-science, that he wanted but one ingredient, faith, to have made him its most learned and able advocate. His distrust of its doctrines is doubtless to be accounted for homœopathically, by his having drank too deeply; and we believe that conviction of their truth is more rapidly brought about by infinitesimal doses of homœopathic literature.

Many have doubted whether homœopathy was entitled to the notoriety of a public reproof, much less to so fair and able a criticism; and for ourselves we are partly of the same opinion; but as the physician stands somewhat in the light of sponsor for his patients, it becomes his duty, perhaps, to warn them against the popular medical fallacies of the day. Besides, the doctrines of homœopathy oppose a barrier of empiricism against the free and natural march of science, and for this reason alone deserve rebuke.

Dr. Holmes barely hints at the long, dark night of mystery and superstition in which the assumed theory of the astrologers and alchemists had its sway. He then draws from the history of credulity, some of the most popular supposed modes of cure that have obtained at various periods of past time, and thus paves the way to his consideration of homœopathy.

The first delusion he selects is that of the royal touch for the cure of scrofula, the belief in the efficacy of which was so

universal, that it was practised by the monarchs of England down to the time of Queen Anne, with the single exception of William the Third who had too much good sense to practice it.— Charles the Second is said to have touched a hundred thousand in twelve years. This belief is still entertained by some, and more conclusive proof can be had of the efficacy of this mysterious power, than we are able to adduce in support of any of the reputed cases of homœopathy. Wiseman, the best English surgical writer of his day, says, “I myself have been frequent witness of many cures performed by his majesty’s touch alone, without any assistance of chirurgery: and those, many of them as had tired out the endeavours of able chirurgeons before they came hither.”

The second is the doctrine of sympathy, which was advocated by the Rosicrucians for the healing of wounds: Two remedies which acquired great celebrity in the seventeenth century were the “Unguentum Armarium, or Weapon Ointment,” and the “sympathetic powder.” The weapon ointment was a preparation used for healing wounds, but, instead of its being applied to them, the injured part was washed and dressed, and the instrument with which the wound was inflicted was carefully anointed with the ointment. Fabricius Hildanus, a great surgeon of that day, was a confirmed believer in the efficacy of sympathetic agents and tried to account for them on supernatural grounds; he believed that much depended on dressing the wound, but that a great deal more was the work of the devil! If the instrument with which the wound was inflicted could not be found, it was usual to anoint a wooden one made to resemble it. “The sympathetic powder” of Sir Kenelm Digby, acquired early in the seventeenth century the most wonderful reputation in Italy for its power of healing wounds. Sir Kenelm having rendered some important service to a monk, the latter through gratitude made known to him the composition and mode of preparing the powder. Sir Kenelm took the secret with him to England where an opportunity soon occurred for trying its powers. A Mr. Howell, having been wounded in separating two of his friends who were engaged in a duel, was the subject of the experiment. It is related that Sir Kenelm, four days after the wound was received, dipped one of Mr. How-

ell's garters in a solution of the powder and immediately the wound which had been painful became easy : in a few days the wound healed. James the First and all the principal personages about the court were cognizant of this fact, and the king being very superstitious obtained the secret and performed many wonderful cures. This powder was believed to possess the power of healing wounds if applied to the blood-stained garment, the wounded person being a long way off at the time.

“ In fact the Unguentum Armarium and Sympathetic Powder resemble some more recent prescriptions ; the latter consisting in an infinite dilution of the common dose in which remedies are given, and the other in an infinite dilution of the common distance at which they are applied.”

The Unguentum Armarium was a delicate compound of mummy, blood, and moss from the head of a thief hung in chains, and the sympathetic powder nothing more or less than blue vitriol, prepared of course in the most imposing manner. The efficacy of both of these was supported by such an array of facts that even the great inductive philosopher, Lord Bacon, gave them his unqualified approval.

The third mode of cure is the use of Tar-Water, the remedy of the renowned Bishop Berkely for all manner of diseases : in speaking of its merits he says, “ I have known children to take it for months together with great benefit and without any inconvenience. This same water will also give charitable relief to the ladies who often want it more than the parish poor ; being many of them less able to make a good meal, and sitting pale, puny and forbidden like ghosts at their own table, victims of vapors and indigestion.” “ It may be made stronger for brute beasts, as horses, in whose diseases I have found it very useful.”

We have not yet heard of homœopathic doses for horses, we fear however they would turn out as did the experiment once made of reducing the food of a horse daily, until it came to a single straw : this experiment was a failure, and such we have reason to believe would be the result if infinitesimal doses were tried in treating the diseases of these very useful animals. The good peo-

ple came to the very philosophical conclusion, that as the distinguished Berkely was a very learned theologian he must of necessity be a very excellent physician; they accordingly drenched themselves with tar-water, which soon came into universal repute.

Luckily this, like other illusions, flourished only for a day, and tar which was then, as now, very useful in assisting the rotary motion of wheels, fell into disrepute as a remedy for disease. Had tar-water retained the high reputation which the great Berkely gave it, physicians would be out of date and invalids would now resort to the Dismal Swamp or Tar-River on account of the petrolian qualities of their waters. The great Berkely was one who believed in the spirituality of matter; "he was a great and good man but held two very odd opinions; that tar-water was every thing, and that the whole material universe was nothing.

The fourth mode of cure, was by means of Perkins' metallic tractors, certain little instruments made of brass and iron wire. The use of these was possibly suggested by the then recent experiments of Galvani on the contractions excited in muscular fibre by the contact of two metals. Dr. Perkins having taken out a patent travelled over this country to make known his wonderful discovery, and sent his son, Mr. Benjamin Douglass Perkins, to England where the tractors soon acquired great celebrity. About this time—the beginning of the present century—they were used in the Royal Hospital of Copenhagen, and in 1804 the Perkinian institute, named in honor of the discoverer, was established in London, with no less a person than Lord Rivers for its president. Pamphlets were published containing certificates from all quarters, and *facts, facts, facts*, "the coin of knaves and cheat of fools," were adduced to prove the wonderful efficacy of the tractors, which were now selling—worth about a penny—at five guineas a pair.

"It cannot but excite our notice and surprise that the number of *clergymen* both in America and Great Britain who thrust forward their evidence on this medical topic, was singularly large in proportion to that of the members of the medical profession.

Whole pages are contributed by such worthies as the Rev. Dr. Trotter of Hans Place, the Rev. Waring Willett, Chaplain to the Earl of Dunmore, the Rev. Dr. Clarke, Chaplain to the Prince of Wales."

First came the certificates of American clergymen, Almshouse Governors, Representatives, Attorneys, Captains, Colonels and Brigadier Generals, the opinion of the latter, whose profession it is to *kill*, was particularly valued as to the best mode of *cure*.— Then came the published cases of Copenhagen. Then followed the reports of over 150 cases cured in England. All classes of the people cried out in favour of the tractors, for they believed their efficacy undoubted. Praises of the art were sung in a poem entitled "terrible tractoration," and finally Perkinism received the patronage of the nobility and even royalty itself. Here there was a host of testimony,

"'Demonstrating the efficacy of the metallic practice in a variety of complaints both upon the human body and on horses, etc.' But the progress of *facts* in Great Britain did not stop here. Let those who rely upon the numbers of their testimonials as being alone sufficient to prove the soundness and stability of a medical novelty, digest the following from the report of the Perkinistic Committee. 'The cases published [in Great Britain] amounted, in March last, the date of Mr. Perkins' last publication, to about five thousand. Supposing that not more than one cure in three hundred which the tractors have performed, has been published, and the proportion is probably much greater, it will be seen that the number, to March last, will have exceeded one million five hundred thousand!'"

But now the excitement was at its highest; some who had purchased the five guinea tractors began to think they had paid dearly for their whistle and would gladly have claimed their money back again, like the poor Jewess Peter Pindar tells us of, whose son fell into the pit of a theatre and was killed soon after the performance commenced: the mother of the luckless lad addressing the stage manager, said—

Sher, I'm de moder of the poor Chew lad,
Dat meet misfortune here so bad—
Sher, I must have de money back you know,
As Moses have not see de show.

But the tractors were not the representatives of their original cost, for none were considered genuine unless purchased from Mr. Perkins, who still found dupes enough to keep his manufacturer constantly employed. All this time, the physicians had jointly turned their backs on the new doctrine, till Dr. Haygarth and some of his friends determined to make some experiments, not with the tractors, that were selling at five guineas a pair, but with wooden ones made to resemble them, slate-pencils and pipe-stems. These they moved over a pain or a tumour with as much gravity as if they had been made of the real stuff, and the patients supposing them to be the five guinea tractors recovered speedily.— This was a sad blow to Perkinism, which began now to decline most rapidly, partly of itself, but mainly on account of the wag-gish interference of Dr. Haygarth. Finally Mr. Perkins returned from England with 10,000 pounds which he had quietly pocketed, while his father had been manually engaged in the same pecuniary labours on this side of the water. At this time a tractor is as rare a curiosity as would be a needle from the work-box of Queen Elizabeth. Dr. Holmes tells us that he was able to procure only a single one of a pair as a specimen.

In reviewing the different modes of cure that have obtained at various periods, we see that they appealed progressively to higher and more intellectual qualities of mind for credence. The cures of the astrologers were connected with a sense of the supernatural and were mysterious in the highest degree, but they died away as the people became enlightened. Then the king's touch for the cure of scrofula, the sympathetic powder and the unguentum armarium affected the imagination through the medium of superstition, but as light came these went out. The illusions of the present day appeal directly to the imagination without any intervention of the supernatural; this indicates at least a change for the better, leading us to hope that as knowledge advances, science will at last flourish untrammelled by illusions which tend so much to hinder its growth. Did the discovery of Jenner or of Harvey

meet with the same hostility from medical men as they manifested towards Perkinism and tar-water? Or if either of these latter absurdities had accomplished any thing that their friends so vauntingly claimed for them is it probable that the incredulity, obstinacy and selfishness of medical men could possibly have set them aside? But it will be said by some, we grant that all the by-gone modes of cure are illusions, but what have they to do with homœopathy? They have much, they have every thing to do with it; for we have seen that these systems claimed a greater degree of success than the regular practice; that they were sustained by a certain kind of evidence which commanded at the time the convictions of the mass, yet still they turned out to be illusions.—Now the question is, what sort of evidence have we in support of homœopathy; can any better or a greater amount of testimony be found in its favor than was adduced to prove the efficacy of the royal touch, the weapon ointment, the tar-water and the tractors?

The advocates of homœopathy say that the regular physician is not the proper judge of its merits; that his interest and prejudice mislead his judgment. If their doctrines are attacked they cry out persecution and talk of the opposition once made to the opinions of Galileo and Copernicus, names that Dr. Perkins had always on his tongue's end when any one chose to doubt the efficacy of his tractors. And thus having the ground to themselves they bring facts in support of homœopathy: now we all know that facts differ as widely from affirmed truths as fiction from reality. The people form their ideas of a new doctrine not from a patient examination of its merits but from the testimony of others; to this testimony (regardless of the fabric of which it is composed) they apply the test of common sense. By common sense we understand—when the term is used with any definite meaning—an exercise of the judgment unaided by any system of fixed rules; such as we must of necessity employ in numberless occurrences, where no fixed line of procedure is chalked out and we are compelled to act on the best extemporaneous conjectures we can form. But common sense is only our second best guide, rules of art and primary knowledge being always more unerring

guides to a correct conclusion. Thus a sailor may despise the pretensions of a medical man and prefer to treat a disease by common sense ; but he would ridicule the proposal of navigating a ship by common sense. The experienced sailor, would be considered a skilled judge of any new system of navigation : ought not the physician to be the best judge of any new system of medicine ? We are somewhat surprised that Dr. Holmes in drawing a picture of defunct illusions illustrating medical fallacies, should not have thrown some life into the sketch by portraying the vital, tangible and enormous doctrines of animal magnetism. We trust that he was not one of those, who published a certificate some time since, announcing a partial belief in mesmerism, and this too after an exhibition of the impositions practised by Dr. Colyer, the apostle of animal magnetism in this country. It cannot be, that Dr. H. with his avowed infidelity upon the subject of homœopathy, and his zealous regard for the dignity and truth of medical science, is a believer in the mysteries of animal magnetism, or willing that all our received notions of the laws of mind should be given to the winds on the faith of such worthless evidence. We began very seriously to fear when we read the certificate above referred to, that much learning had possibly made our Athenian brothers mad. For our own part, we must see exhibitions of mesmerism, other than those furnished by that shameless juggler, Dr. Colyer, before we give one jot or tittle of our credence to its pretensions. Homœopathy and mesmerism are twin creations, born in the same land of mysticism, at nearly the same period of time, and fed upon the same food, the credulity of mankind ; the one a fiction based on electro-magnetism, the other a romance appealing to medical science for its facts ; the advocates of these illusions—pigmy Vattermeres, who preferred to play the pranks of Alexanders—having acquired a sufficient number of *facts* strutted out of Germany, and afterwards vainly endeavoured in all the kingdoms of Europe to introduce their dogmas within the pale of science. These delusions having singly and together attracted an equal amount of attention on the other side of the Atlantic, and the food on which they fed becoming exhausted, came to our shores after the manner of cholera and in-

fluenza: for when their doctrines were regarded in Europe, with few exceptions, as the relics of by-gone absurdity, they were found prevailing epidemically in different sections of our country.— These follies are to be regarded as psychological epidemics, acting on the minds of men as do cholera and influenza on their physical susceptibilities.

It would be curious to analyze the causes of the credulity and skepticism of the present day; their most prolific sources would seem to be, the brilliant discoveries in science of the past half century. A steam-engine is seen for the first time hurried along with incredible velocity, and the mind of the observer, ignorant of the principles on which it moves, is struck with wonder and astonishment: having witnessed a result which years ago the most brilliant imagination could never have conceived, he is willing to believe any announcement, no matter how incredible or impossible.. Let such a man be made to understand the beautiful adaptation of mechanical principles to steam power, and his wonder and ignorant belief give place to admiration for the simple and admirable contrivances by which steam is applied for the purposes of locomotion; and when any discovery is made known to him the result of which is perhaps less evident to the senses than that of the steam engine, he will remain in a state of rational doubt as to the truth of the statement until he has examined the laws on which it rests, or the inductive reasoning which led to it: in this case, as the other, he will only be satisfied with believing intelligently. The credulous are apt to become, of all men, the most sceptical when the falsity of doctrines which they are accustomed to believe is forced upon them; hence the importance of keeping the mind nicely balanced between credulity and scepticism. But the scale of ignorant belief weighs down heavily at the present day, and predominates largely over the tendency to doubt. Is there any mode of accounting for this? The period from the beginning of the present century has been distinguished for its works of imagination, so much so indeed, that there is scarcely a legend which has not been woven to assume the character of reality, or an historical truth that has not been made to wear the dress of fiction. This cultivation of the imagination over every other quality of mind acts as a fire-brand to

truth, inflaming our fancy and disposing us to believe what is impossible; and science has not, nor can hope to escape its baneful tendency. In proof of which various instances might be cited of highly imaginative theories which have supervened upon the records of scientific truth. One of the most striking is that of the fanciful doctrine of Lamark, which grew out of the abundant discoveries in natural history, from the rich stores of which he drew facts to establish his visionary theory of the accidental development of all that belongs to this transcendent universe. How many of us believed when we were children, or do still believe, that the heroes of our story-books were real personages; that there was such a person as Jack the Giant Killer, a Robinson Crusoe and his man Friday, or that there was really such a place as Lilliput, which was visited by a Gulliver and inhabited by very diminutive people, and that all of these were real men made of flesh and blood like us. Now it matters not whether we believe all this or not, and if the Brobdignagian historian, in narrating the customs of the Lilliputians, had described homœopathy as a system of medicine amongst them, no one would dream of acting out its precepts, and it would matter very little whether or not we believed that such a system had ever flourished. Swift created a city and peopled it with men who are described as being about three inches high, a whole army of whom could not kill a Gulliver. Hahnemann has created a system of medicine, and has made his doses so minute as to render it extremely doubtful whether all the agents of the *materia medica* would ever have cured that same Gulliver. But, according to the doctrine "*similia similibus curantur*," homœopathy might have been described as a system of medicine in Lilliput, having more apparent success than can be claimed for it now, for there the minute doses might have answered the wants of the infinitesimal inhabitants. In time to come the writings of the controversialists of the present day will be found laying quietly side by side, on dusty shelves, peacefully mocking the zeal and folly which placed them there; and then the history of medicine in the nineteenth century will be written by those who will regard homœopathy as an extraordinary medical romance, and will as soon think of looking to it for truth, as we

would of going to Dr. Lever for facts connected with the Peninsular war.

Dr. Holmes rates the clergy as being remarkably prone to encourage empiricism and with some truth, for we have seen how many divines advocated the use of Perkins' points; then the learned Bishop Berkeley, who fancied he had discovered in tar-water an *Elxir Vitæ*, and now many Reverend gentlemen are to be found zealously advocating the claims of homœopathy: and these too, without any distinction of creed; for however widely they may differ on theological points, they have but one confession of faith in medicine. They are, however, excusable in part, on the ground that their profession often calls them to administer consolation to the dying, where medicine has been unavailing, and being very generally men of great benevolence, they are disposed to adopt any empirical remedy, with the hope that it may alleviate pain or restore health. With us it is difficult to say who stand first as advocates of homœopathy, or any other form of empiricism; they may be found amongst men of all complexions and degrees, from the poor slave who believes that he has been conjured, and consults a fortune-teller, to the possessor of wealth, who only seeks some form of empiricism on which to lavish his credulity. The champions of Hahnemann are for the most part old women of both sexes, who have been dyspeptic all their lives, and have consequently given much more attention to the condition of their bowels, than to the improvement of their brains; with such indeed, homœopathy works well, for it dispenses with the nostrum, patent compound, or Halstead shampooing, one or the other of which the dyspeptic had been in the constant habit of employing, and now that all this violence is laid aside, and nature is permitted to repair her wrongs, the return of health is attributed by these abdominal philosophers, to the wonderful potency of doses so infinitely minute that their very existence is a matter of bare suspicion. Empirics value most the approbation and certificates of men of title, well aware that a large mass of the people are in the habit of looking to these dignitaries for advice, and of being governed by them in matters of opinion.—The people forget that although a representative may be a very wise law-maker, and a judge a very learned jurist, it does not fol-

low that the one or the other is acquainted with the organization of the human body, the functions of the different organs, or the laws which regulate disease. All persons occupying offices of honor or influence should pause before subscribing their names to any sort of empiricism. The invalid is always the poorest judge of the nature of his disease, and although a patent remedy may be very good in a given case, it is the rarest accident in the world if it is applied to the condition in which it might be useful. All nostrums are sold at a very exorbitant price, much above the cost of their ingredients, which can always be procured at any drug store for a mere trifle: the poor who are the chief consumers of them become more impoverished, besides having their sufferings greatly enhanced. The name of one of the first men in our country may be seen in a daily print, appended to a certificate announcing the virtues of a nostrum advertised under the seductive title of "Life Preservers." The advocates of homœopathy or any other sort of quackery are generally persons of chameleon fancy and weak judgments; they little think that in giving their opinions so freely about matters of which they obviously know nothing, they are apt to excite in the minds of sober thinkers painful surmises, that their judgment is equally crude on other subjects of which they are expected to know something. To those of the learned Bishop Berkeley's school, and to all amateur homœopaths who for conscience sake dabble in empiricism, we say, "labor to be quiet and do your own business," a sacred injunction against officious meddling, the observance of which, common civility requires, morality exacts, and religion peremptorily demands.

In raising our voice against homœopathy, we claim to act entirely on the defensive; for Hahnemann, not content with coining a name of classical origin to express his own system, has coined one for the whole community of innocent physicians pronouncing them all to a man "allopathists." Besides, the followers of Hahnemann have compared the success of their own practice with that of the regular physician, and have drawn conclusions in their own favour, and have endeavoured to show the utter worthlessness of the accumulated stores of medical knowledge from the

time of Hippocrates till now: by which means, a large number of the credulous have been deluded into the belief that homœopathy is the only safe and successful mode of practice. We do not expect to influence the belief of those who think that they have experienced personal benefits from homœopathy, nor of those who have had a beloved relation raised from the bed of sickness while under its treatment, for the belief of all such is influenced by feeling rather than judgment. It is not our purpose to ridicule homœopathy, since that would be no test of its truth; many things having been ridiculed, the truth of which was afterwards established. The writings of Hahnemann are brilliantly fanciful and imaginative in the highest degree: much of his organon may be read with the interest of a novel: it is much to be regretted, that he did not exercise his powers of fiction upon some more legitimate subjects of romance.

We are told that Hahnemann while a young man, being struck with Cullen's description of cinchona bark, became desirous to ascertain its mode of action, and accordingly, while in the enjoyment of perfect health, commenced its use: in a short time he was affected with all the symptoms belonging to intermittent fever. Being struck with the identity of the two diseases, he derived from this single supposed fact the grand doctrine of homœopathy. Now that Hahnemann believed that he experienced all the symptoms of intermittent fever we have no reason to doubt; for we all know that every medical student of ardent imagination, believes that he has the symptoms of one or all the diseases which happen for the time to occupy his mind. So it is with the enthusiastic essayist who thinks he feels, or perhaps does actually experience, a certain set of symptoms after the use of a drug which he believed at first would produce them. For the more perfect expression of his grand primary doctrine Hahnemann has chosen the aphorism, "*similia similibus curantur*," or, *like cures like*. The homœopaths affirm from experiments on themselves and others, that a large number of remedies produce symptoms identically similar to those which belong to different diseases: now to establish this, it would require a very large number of experiments on healthy persons of both sexes, and that these persons should be free from

all the causes, moral and physical, which would be likely to influence the effects of the remedies used. They would be compelled to avoid the use of tea, coffee, perfumes of every kind, all the vegetables except one or two, and in a word to observe such a system of restriction for weeks together, as none but a few enthusiastic homœopathists would ever submit to. We once supposed when we heard that Hahnemann abjured anatomy and physiology, that the study of his system was very simple, but it would seem that the difficulties are insurmountable, for it would be impossible to get a sufficient number of persons in health to submit for a sufficient length of time to the required restrictions.

“The second great fact which Hahnemann professes to have established, is the *efficacy of medicinal substances reduced to a wonderful degree of minuteness or dilution*. The following account of his mode of preparing his medicines, is from his work on chronic diseases, which has not, I believe, yet been translated into English. A grain of the substance, if it is solid, a drop if it is liquid, is to be added to about a third part of one hundred grains of sugar of milk in an unglazed porcelain capsule, which has had the polish removed from the lower part of its cavity by rubbing it with wet sand; they are to be mingled for an instant with a bone or horn spatula, and then rubbed together for six minutes; then the mass is to be scraped together from the mortar and pestle, which is to take four minutes; then to be again rubbed for six minutes. Four minutes are then to be devoted to scraping the powder into a heap, and the second third of the hundred grains of sugar of milk to be added. Then they are to be stirred an instant and rubbed six minutes—again to be scraped together four minutes and forcibly rubbed six; once more scraped together for four minutes, when the last third of the hundred grains of sugar of milk is to be added and mingled by stirring with the spatula; six minutes of forcible rubbing, four of scraping together, and six more (positively the last six) of rubbing, finish this part of the process.

“Every grain of this powder contains the hundredth of a grain of the medicinal substance mingled with the sugar of milk.—If,

therefore, a grain of the powder just prepared is mingled with another hundred grains of sugar of milk, and the process just described repeated, we shall have a powder of which every grain contains the hundredth of the hundredth, or the ten thousandth part of a grain of the medicinal substance. Repeat the same process with the same quantity of fresh sugar of milk, and every grain of your powder will contain the millionth of a grain of the medicinal substance.—When the powder is of this strength, it is proper to employ in the further solutions and dilutions to be made use of in practice.

“A grain of the powder is to be taken, a hundred drops of alcohol to be poured on it, the vial to be slowly turned for a few minutes, until the powder is dissolved, and two shakes to be given to it. On this point I will quote Hahnemann’s own words.—‘A long experience and multiplied observations upon the sick led me within the last few years to prefer giving only two shakes to medicinal liquids, whereas I formerly used to give ten.’—The process of dilution is carried on in the same way as the attenuation of the powder was done; each successive dilution with alcohol reducing the medicine to a hundredth part of the quantity of that which preceded it. In this way the dilution of the original millionth of a grain of medicine contained in the grain of powder operated on, is carried successively to the billionth, trillionth, quadrillionth, quintillionth, and very often much higher fractional divisions. A dose of any of these medicines is a minute fraction of a drop, obtained by moistening with them one or more little globules of sugar, of which Hahnemann says it takes about two hundred to weigh a grain.

“As an instance of the strength of the medicines prescribed by Hahnemann, I will mention carbonate of lime. He does not employ common chalk, but prefers a little portion of the friable part of an oyster shell. Of this substance, carried to the sextillionth degree, so much as one or two globules of the size mentioned can imbibe, is a common dose. But for persons of very delicate nerves it is proper that the dilution should be carried to the decillionth degree. That is, an important medicinal effect is to be expected from the two hundredth or hundredth part of the mil-

lionth of the millionth of the millionth of the millionth, of the millionth of the millionth of the millionth, of the millionth, of the millionth of the millionth of a grain of oyster-shell. This is only the tenth degree of potency, but some of his disciples profess to have obtained palpable effects from much higher dilutions.

“The third great doctrine of Hahnemann is the following.—*Seven-eighths at least of all chronic diseases* are produced by the existence in the system of that infectious disorder known in the language of science by the appellation of PSORA, but to the less refined portion of the community by the name of ITCH. In the words of Hahnemann’s *Organon*, ‘this Psora is the sole true and fundamental cause that produces all the other countless forms of disease, which, under the names of nervous debility, hysteria, hypochondriasis, insanity, melancholy, idiocy, madness, epilepsy, and spasms of all kinds, softening of the bones, or rickets, scoliosis and cyphosis, caries, cancer, fungus hematodes, gout, yellow jaundice, and cyanosis, dropsy, gastralgia, epistaxis, hemoptysis, asthma, and suppuration of the lungs, megrim, deafness, cataract, and amaurosis, paralysis, loss of sense, pains of every kind, &c., appear in our pathology as so many peculiar, distinct and independent diseases.’ ”

Sycosis, or the fig disease, and syphilis are the other two prolific sources of chronic disease. Hahnemann tells us that this discovery cost him twelve years of hard labor. The simple announcement of these doctrines is sufficient for those accustomed to weigh medical opinions, and to every one they must appear in the highest degree improbable; should they not therefore be rejected unless they can be sustained by clear and convincing evidence?

The more probable a thing is, the less we are in the habit of requiring evidence of its truth. A thousand things are advanced, the truth or falsity of which we determine by reference to our previous knowledge. If any thing so unreasonable and remarkable is announced, that is, inconsistent with our past experience, do we not require the strongest evidence of its truth? Now, when contrary to the combined experience of learned and wise medical

men for more than two thousand years, opinions so very novel and highly improbable as those of homœopathy are advanced, should we not reject them entirely, unless they can be sustained by clear and undoubted evidence?

We shall say but little of one law which Hahnemann has endeavoured to establish—that all chronic diseases originate in sy-cosis, itch or syphilis—for it is so entirely assumed and destitute of even the shadow of proof that few homœopathic writers venture to defend it. Hahnemann supposes that any one of these three poisons imbibed ages ago, became more and more prolific of chronic diseases in proportion as it was diluted in the blood of each successive generation. Nothing could be more fanciful than this purely gratuitous doctrine, which seems to have originated in the supposed power of infinitesimal doses in antagonizing some morbid poison; and in the absence of any other mode of accounting for the fancied existence of such poison it was laid at the door of itch, sy-cosis, and syphilis. According to this law, the paralysis of the aged father, or the sighs of the love-sick damsel, can only originate in one of these loathsome diseases, which are to be found for the most part in the haunts of vice, misery and degradation. Nothing could serve to illustrate the character of Hahnemann's mind better than his having originated a groundless doctrine, in which he continues to persist with the senseless obstinacy of a monomaniac.

“In order to show the axiom, “*similia similibus curantur*,” or, like is cured by like, to be the basis of the healing art, “the sole law of nature in therapeutics”—it is necessary—1st. That the symptoms produced by drugs should be faithfully studied and recorded. 2d. That drugs should be always capable of curing those diseases most like their own symptoms. Hahnemann and his associates experimented on the effects of drugs in healthy persons, by taking a substance on trial in common or minute doses, and then noticing every little bodily inconvenience, which they experienced for hours, days or weeks afterwards. The following abstracts from the materia medica of Hahnemann will serve to show the kind of symptoms narrated as the effects of given agents.

“ ‘After stooping some time, sense of painful weight about the head, upon resuming the erect posture.’

‘An itching, tickling sensation at the outer edge of the palm of the left hand, which obliges the person to scratch.’ The medicine was acetate of lime, and as the action of the globule taken is said to last twenty-eight days, you may judge how many such symptoms as the last, might be supposed to happen.

“Among the symptoms attributed to muriatic acid, are these: a catarrh—sighing—pimples—‘after having written a long time with the back a little bent over, violent pain in the back and shoulder blades, as if from a strain,’—‘dreams which are not remembered—disposition to mental dejection—wakefulness before and after midnight.’”

The candid enquirer naturally asks if there are not others on whom we can rely with confidence ready to confirm or deny the pretended facts adduced by Hahnemann and his friends? Andral, Professor of medicine in the school of Paris, a man of the utmost liberality and probity, and who is called in the first number of the *Homœopathic Examiner*,—“an eminent and very enlightened Allopathist,” assisted by a number of other persons in good health, experimented on the effects of cinchona, aconite, sulphur, arnica, and the other most extolled remedies. His experiments lasted a year, when he stated to the Academy of Medicine, that they never produced the slightest appearance of the effects attributed to them.—M. Double, a well known medical writer and physician, as long ago as 1801, before he had heard of homœopathy, experimented on cinchona or Peruvian bark. He and several of his friends took the drug in every kind of dose, and the symptoms it is pretended by Hahnemann to excite, never were produced. M. Bonnet had occasion to observe the effects of cinchona on a large number of soldiers to whom it had been given as a prophylactic. He never found it produce the pretended paroxysms. It is fair to conclude then, that the symptoms attributed by homœopaths to the influence of various drugs are not entitled to credit.

In the next place it is necessary to show, that medicinal sub-

stances are always capable of curing diseases most like their own symptoms. No one has ever denied that there sometimes exists a resemblance between the effects of a remedy and the symptoms of diseases in which it is beneficial: this has been noticed, as Hahnemann avers, by medical writers since the time of Hippocratis: Sir Gilbert Blane had reference to this, when asked by a patient why he put so many things in his prescription,—he replied, in order that the disease may take the one it likes best. But no one ever dreamed of adopting this as a maxim, nor has it ever been considered that the efficacy of these few remedies bore any ratio to their power of producing symptoms more or less like those they cured. To show the pedantic folly of which Hahnemann has been guilty in endeavouring to establish his great doctrine, let one example suffice. He asserts in the page 110 of his *Organons* that the smell of the rose will cause certain persons to faint.

“‘It was by these means (i. e. homœopathically) that the Princess Eudisia with rose-water restored a person who had fainted!’

“‘Is it possible that a man who is guilty of such pedantic folly as this; a man who can see a confirmation of his doctrine in such a recovery as this; a recovery which is happening every day—from a breath of air—a drop or two of water—untying a bonnet-string—loosening a stay-lace—and which can hardly help happening, whatever is done; is it possible that a man, of whose pages, not here and there one, but hundreds upon hundreds are loaded with such trivialities, is the Newton, the Columbus, the Harvey of the nineteenth century!’”

The homœopathists are in the habit of advancing several familiar illustrations as opening wedges to a belief in this law, or as popular arguments in its support. One of the most common, is the relief derived from applying snow to a part that is frozen. This at first sight appears very happy, and few of those to whom the example is offered reflect that, when snow is applied heat is slowly yielded to the frozen part, and the injurious effects of the too sudden admission of caloric is thus prevented. The mitiga-

tion of pain afforded by applying heat to a slight burn is also urged in its support: but the law is, like cures like, and not, same cures same, as the example would indicate. Suppose the burn has destroyed the skin, or charred the muscles, the argument, false as it is, does not apply, for here the application of heat is no longer beneficial. The erythematous and phlegmonous inflammation in chilblain is relieved even more than a burn, by the glare of red-hot coals: now unless the homœopathists can discover some resemblance between ice and fire, what becomes of the analogy? The acknowledged efficacy of vaccination is another instance adduced in support of the law. But the effects of the vaccine virus on a healthy person only prevents small-pox, and does not cure it, which it ought to do if the homœopathic law were true; and so will small-pox prevent itself. The same is true in respect to whooping-cough, measles, and all other diseases dependent upon a peculiar susceptibility of system to the action of their own poison, and this susceptibility being worn out they can never happen again: with this knowledge they, as well as ourselves, are obliged to be content.

The homœopathic doctrine of infinitesimal doses being the more practical is after all the most important point. In preparing the minute doses the number 100 is used as a multiplier.—Thus when the homœopathists prepare a liquid medicine, they take one drop and mix it with one hundred drops of spirits of wine for the first dilution; for the second, they take ten thousand drops, and so on always multiplying by 100. Dr. Palvini has made a calculation how much alcohol it would take to dilute a medicinal drop, and how much sugar is required to attenuate a grain of powdered medicine to the thirtieth degree of dilution.

“For the first dilution it would take 100 drops of alcohol.

“For the second dilution it would take 10,000 drops, or about a pint.

“For the third dilution, it would take 100 pints.

“For the fourth dilution it would take 10,000 pints, or more than 1000 gallons, and so on to the ninth dilution, which would take ten billion gallons, which he computed would fill the basin of Lake Agnano, a body of water two miles in circumference.—

The twelfth dilution would of course fill a million such lakes. By the time the seventeenth degree of dilution should be reached, the alcohol required would equal in quantity the waters of ten thousand Adriatic seas. Trifling errors must be expected, but they are as likely to be on one side as the other, and any little matter, like lake Superior or the Caspian, would be but a drop in the bucket."

Pulverizable substances are used in the same proportion. M. Palvini says that the quantity of sugar required for the thirtieth degree of attenuation would equal in bulk the terrestrial globe, all our planetary systems and all the stars of the first and second magnitude which may be seen on a fine summer's night, and for the fortieth dilution perhaps all the constellations that can be discovered from one pole to the other. The Hahnemannists do not take the whole of the liquid that is to be divided, but the hundredth or the hundred thousandth part alone, so that to arrive at the thirtieth dilution, thirty little parcels will suffice, each of which will contain 100 drops of alcohol. It is with medicines thus divided that the homœopathists practice. We have met with those who believed that the little pellets they took were composed entirely of the medicinal substance, and had never dreamed that these little globules of sugar, small as they are—bear about the same relation of quantity to the medicinal fluid that the terrestrial globe does to the dew which surrounds it. Is it not improbable in the highest degree that quantities of matter so infinitely small should produce the effects assigned to them? a single grain of lime, pounds of which exist in the bones of every adult, if taken into the stomach produces no effect, and yet when divided into particles so small as to elude the powers of imagination to conceive, it is pretended that wonderful medicinal powers are developed. Should we credit an announcement so very remarkable, so highly extraordinary, unless it can be proved by the more cautious and well directed experiments performed in public, with every care to guard against error, by persons not pledged to the system, and having the most plain, satisfactory and undeniable results?

It is extremely probable that many homœopathic doses do not contain the smallest imaginable particle of the medicinal substance, for we have no means of determining whether matter is capable of infinitesimal division: the theory of numbers indicates the possibility of infinite attenuation, but the presumptive evidence furnished by the laws of attraction and cohesion is as strongly opposed to such a belief. But since this is a question which in the present state of our knowledge is insusceptible of proof, let us take it for granted that matter is capable of such division, and it does not at last follow as a necessary corollary, that exact quantities of the medicine exist in each grain of sugar or drop of alcohol with which it has been mingled.

The homœopathists deny altogether any recuperative power of nature, and regard every case which recovers under their treatment as a cure performed solely by the unaided influence of minute doses. They are indifferent as to the exact nature of disease, its history or the alterations of tissues which may occur in it, and regard only its symptoms: Now we all know the fallacious nature of mere symptoms, which may resemble each other in a dozen pathological conditions differing widely in character. Analogies have been sought in the imponderables generally to prove the supposed potency of minute doses. Is it not owing, with few exceptions, to the uniform relation existing between quantity and force that numbers have been so successfully applied to the investigation of natural and physical sciences, and is it not true in most cases that definite quantities are required to produce, under similar circumstances, definite results?

The diffusibility of odours has been advanced in proof of the supposed potency of infinitesimal doses. We know that odours are a special property of matter, and that a special sense has been provided by which alone they are detected and made the tests of the quality or kind of various substances: through the medium of their appropriate sense they are sources of pleasure or disgust, and from mental association they may excite loathing, nausea, appetite, and so on; but to say that the action of odours bears any resemblance to the mode in which the known effects of medicinal substances are produced, is no less absurd than it would be to

announce that the olfactory nerves are altogether superfluous, and that touch, sight and hearing are one, and all the proper recipients of odoriferous emanations. Has it ever been demonstrated that the particles from a drop of otto of roses act more powerfully on their recipient sense when diffused in open air than they would do if confined within the compass of a smelling bottle? We know at least enough about the laws of light and electricity, to understand that they bear no relation to the phenomena attending the action of any single medicinal agent with which we are acquainted. If the homœopathists will explain to us any mode by which a saloon can be illuminated by a single ray of light, it will then be time for us to listen to analogical proof. The effects produced by mental emotions are also urged in proof. We are told that a paroxysm of grief has been known to turn the hair perfectly grey in a single night; and here again a resemblance is assumed between the mode in which this takes place, and the action of diffused medicinal substances. There are few things so widely dissimilar that some crazy analogy may not be traced between them. We are reminded of the child who having studied the celestial globe, believed beyond the power of contradiction, that one constellation not only bore a resemblance to, but actually was, a great bear. A comet and a cow might be supposed by some to bear a strong analogy to one another owing to the fact that they both have tails, and by others on account of some equally striking similarity. The analogies which the homœopathists endeavour to draw in support of their laws resemble strongly those of the maniac, who often believes that the chairs and tables in his apartment are his old and valued friends, and as such talks to and caresses them, or that his blankets are so many heavens: these conclusions he arrives at by a process of insane analogy which he is unable to explain, or the observer to comprehend.

Dr. Holmes examines the mode in which the homœopathists state their successes, and their remarks upon the difficulties attending medical evidence. No one doubts that some patients recover under every system of practice, and that a large majority of such cases as a physician in daily practice is called to see, would re-

cover with difficulty, sooner or later, provided nothing were done to interfere seriously with the efforts of nature.

“Suppose then a physician who has a hundred patients prescribes to each of them pills made of some entirely inert substance, as starch, for instance.—Ninety of them get well, or if he chooses to use such language, he cures ninety of them. It is evident according to the doctrine of chances, that there must be a considerable number of coincidences between the relief of the patient and the administration of the remedy. It is altogether probable that there will happen two or three *very striking* coincidences out of the whole ninety cases, in which it would seem evident that the medicine produced the relief, though it had, as we assumed, nothing to do with it. Now suppose that the physician publishes these cases, will they not have a plausible appearance of proving that which, as we granted at the outset, was entirely false? Suppose that instead of pills of starch he employs microscopic sugar-plums, with the five million billion trillionth part of a suspicion of aconite or pulsatilla, and then publishes his successful cases, through the leaden lips of the press, or the living ones of his female acquaintances—does that make the impression a less erroneous one? But so it is that in homœopathic works and journals and gossip one can never, or next to never, find any thing but successful cases, which might do very well as a proof of superior skill, did it not prove as much for the swindling advertisers whose certificates disgrace so many of our newspapers. How long will it take mankind to learn that while they listen to “the speaking hundreds and units, who make the world ring” with the pretended triumphs they have witnessed, the “dumb millions” of deluded and injured victims are paying the daily forfeit of their misplaced confidence !”

An account is given by Dr. Palvini, one of the physicians to the Hospital della Pace, of a public trial of homœopathy made at Naples under the supervision of a committee of physicians.—They first tried whether a certain class of patients would not recover without any remedy. Ten cases were set aside and not permitted to take any medicine at all: the homœopathic physi-

cian declaimed against the expectant practice, declaring that delay might jeopardize the lives of the patients; the commission however persisted that no medicine should be given, and in a short time every case got well. Had these patients been subjected to treatment the cures which kind nature made would have gone to glorify homœopathy. Six mild cases were subjected to treatment, but the commission were unable to discover the slightest symptoms attributed to the different remedies. All the rest were cases of grave disease, and on the fortieth day of treatment these had grown worse or received no benefit. The physician who prescribed on this occasion was M. de Horatiis, who has since renounced homœopathy.

Two homœopathic physicians experimented for four or five months in Dr. Baillie's ward at the Hotel Dieu, of Paris, the remedies used were procured at the pharmacy which furnished Hahnemann. The results of this trial were most unsatisfactory.— Similar experiments were made at the Hotel Dieu, of Lyons, with the same entire failure.

“ M. Andral, the ‘ eminent and very enlightened allopathist’ of the *Homœopathic Examiner*, made the following statement in March 1835, to the Academy of Medicine. ‘ I have submitted this doctrine to experiment; I can reckon at this time from one hundred and thirty to one hundred and forty cases, recorded with perfect fairness, in a great hospital, under the eye of numerous witnesses; to avoid every objection I obtained my remedies of M. Guibourt, who keeps a homœopathic pharmacy, and whose strict exactness is well known; the regimen has been scrupulously observed, and I obtained from the sisters attached to the Hospital, a special regimen, such as Hahnemann orders. I was told, however, some months since, that I had not been faithful to all the rules of the doctrine. I therefore took the trouble to begin again; I have studied the practice of the Parisian homœopaths, as I had studied their books, and I became convinced that they treated their patients as I had treated mine, and I affirm that I have been as rigorously exact in the treatment as any other person.’ ”

And having experimented with the most highly approved ho-

mœopathic substances, he expressly asserts that they have none of the effects attributed to them. But it will be said, that these are old and prejudiced practitioners. Then take the statement of Dr. Fleury, a highly intelligent young physician who treated more than fifty cases homœopathically without discovering the slightest curative powers in the remedies used. Had there been any truth in the doctrines of Hahnemann, would not learned and wise men have been found to advocate them? Had any marked advantage been derived from a system which has been advanced for fifty years, would not the good sense of mankind have determined its utility? on the contrary it has nowhere met with any very marked success. If Belladonna were really a preventive against a disease so fatal as scarlatina, would not the fact be established beyond the power of contradiction, or could the eyes of mankind be closed against an announcement so important, and would not the truth stand forth in the full light of a discovery no less brilliant than those of Jenner and Harvey? Jenner's discovery was made public in 1789, and in 1802 the value of vaccination was so well established, that the House of Commons voted him the sum of ten thousand pounds, and in four or five years the sum of twenty thousand pounds in addition. Dr. Haygarth, who was so conspicuous in exposing the follies of Perkinism, was one of the first to express his opinion in favour of vaccination. The discovery of Harvey met with bitter opposition at first, but in a few years its truth and importance were universally acknowledged.

The statements of the unprofessional public in favour of homœopathy are not to be relied on, for we have seen that old women carried the tractors in their pockets, notwithstanding Dr. Haygarth and Dr. Alderson had proved that they could work the same miracles with pieces of wood and a tobacco pipe, and yet in the very face of this demonstration many persons were to be found who still believed in Perkinism. Is it to be hoped then, that the public trials which have been made of homœopathy can possibly silence its advocates, notwithstanding the absolute nullity of its doctrines has been clearly demonstrated? But it is said that the Marquis of Anglesea and the Queen Dowager Adelaide have been treated homœopathically, to this we need only reply that Royalty itself was claimed in behalf of Benjamin Douglass Perkins.

When the Minister of Instruction decided that the government of France ought not to extend its patronage to homœopathy, it was considered an act of persecution no less severe, than the sentence passed upon the system of Galileo by the Inquisition of Rome. And thus every public rebuke given to homœopathy, induces Hahnemann to believe that he is the Harvey, the Jenner and Copernicus of the nineteenth century. Hahnemann believes that the failure of his doctrines in Europe is owing to the prejudices of long established institutions, and looks to this country for their success; having succeeded here, he thinks they will take a reflex action and be received in Europe. In reply to this we only ask what became of the homœopathic physician who put a pharmacy in the finger of his glove and went to Egypt? The bigotry and prejudices of hoary institutions had surely nothing to do with the utter and entire failure of that enterprise.

It is a part of the religion of the Hindoos to eat nothing which is the product of animal life. One of their Bramins was convinced by the aid of a powerful microscope that myriads of living creatures existed in all articles of food, and that consequently the practice of his people was false; he feared to communicate his knowledge, believing that the devotion of the Hindoos to their religion would induce them to starve themselves to death rather than disobey one of its precepts. Since Hahnemann advanced his doctrines, chemistry has been ceaselessly at work and has demonstrated as clearly to the homœopathist, as did the microscope to the Bramin—that if the doctrine of infinitesimal doses were true, all nature would be drugged and our race destroyed. The devotion of the Hindoo to a maxim of his false religion exceeds the love which the ultra medical enthusiast has for truth. The one remains in ignorance because he has no light, the other because he will not see.

Finally, many of the former friends of Hahnemann having adopted the new doctrine of hydrosudopathy, or hydropathy, are now “actively engaged in throwing cold water at once on their patients and the future prospects of homœopathy.” After what we have seen we can only regard the doctrines of Hahnemann as absolute nullities and his system of practice as nothing more than a mere medical impotency. We all know that patients get well under

homœopathic treatment and under every other system of practice. But since the effects attributed to infinitesimal doses are at best extremely improbable, vague and insusceptible of proof, ought we not to exhaust all possible modes by which patients may recover, rather than entertain a suspicion that their cure is attributable to the supposed action of homœopathic remedies? We cannot deny to homœopathy the power of influencing the imagination which is yielded to many other forms of empiricism, but we think its occasional success mainly owing to the rigid system of diet to which patients under its care are subjected. Any system of practice from which we can learn nothing would be less than worthless. The hardy empiricism of the Thomsonians, and the Russian Bath system, teach us how much violence may be inflicted in many cases without danger, and homœopathy teaches us that a large number of patients recover through the unassisted powers of nature alone. Should it not be the chief object of the physician then to understand the laws which regulate disease?—With these he can only become familiar by an intimate acquaintance with pathology in the widest sense of the term; he should be master of the means by which the rational and physical signs of disease are detected, perfectly acquainted with morbid actions, their exact character and mode of production, and the course they would take uninfluenced by medicine: for by these means alone, he is enabled to appreciate the value of remedies and to determine whether dispensing with the nauseous drug the patient can recover through the unassisted powers of nature, or apply his remedies where suffering organization calls, in language not to be mistaken for his assistance. The daily reports we often hear from a patient laboring under protracted disease indicate that the physician in attendance is either ignorant of the natural history of the disease he is treating, or that he is wilfully tampering with the hopes and fears of distressed relations who are anxiously hanging about the bed-side of his patient. We will take for example a case of typhoid—continued fever—in such a case the reports sanctioned by the physician in attendance are often most remarkable; to-day we hear perhaps that the patient is better, the next that he is worse, on the following morning that he

is much better, on the evening of the same day that he is not expected to live; at one moment the friends of the invalid are buoyant with hope, and the next overwhelmed with fears: more anxiety and grief is suffered than ten thousand deaths ought to occasion under a proper system of things. Why, often the daily reports of such a case could not be more remarkable if the medical attendant, instead of rationally treating a disease, were engaged in small-sword combat with some personification of the angel of death; to-day the disease has the advantage, the next the physician has by wondrous skill got the better of it, but in a little while the odds are once more against him. Now, disease is seldom if ever subject to these remarkable vicissitudes, but for the most part marches steadily on from its commencement to a fatal or a happy termination. How important it is then in a moral point of view alone, that the physician should be able to tell what the duration of a disease is, the phenomena which may be expected to arise during its course and its probable result. We fear it is too often a maxim with the physician to make the case of his patient appear as bad as possible, knowing that the result, be it happy or unfortunate, can only redound to his credit; if this rule is observed and the patient dies he is exempted from all blame, for it is then said that the result was inevitable; every thing—too much perhaps—having been done that human skill could devise. And if the patient recovers, the successful issue of the case is attributed to the wonderful sagacity and super-human skill of his medical attendants. The consequence of this is, that the physician is not regarded as an agent, wisely dispensing the benefits of science, but as a walking specific, or the very incarnation of a patent life-preserver.

If an intelligent man have an important case before a court of justice his main reliance is on the resources of the law, the legal ability of his council he regards as a matter of secondary importance; let this same man be suffering from disease and he will not look with confidence to the resources of science for relief, but rely entirely on the personal sagacity of his physician. Persons generally are too apt to imagine that science suggests nothing, but that their own physician can, by his unaided experience, do every thing for their relief.

EPITOME OF
American Medical Journals.

———Like the bee, tolling from every flower
The virtuous sweets, we bring them to the hive.

SHAKSPEARE.

THE NEW ENGLAND QUARTERLY JOURNAL OF MEDICINE AND
SURGERY. No. 3, January, 1843.

ART. 1. *Statistics of Pulmonary Consumption in the Cities of Boston, New York and Philadelphia, for thirty years; with remarks.* By Geo. Hayward, M.D.—Bills of mortality are not always to be relied on with entire confidence; all that can be gained from them is an approximation to the truth. From those kept in Boston, Philadelphia and New York, Dr. H. has prepared tables extending from 1811 to 1840, and displaying the whole number of deaths in each year from every cause, and also the number from consumption during the same period. The most striking fact brought to light by these tables is the great decrease in these cities of deaths by consumption; a decrease which has been great in all, but greater in Boston than in either of the others. This diminution, Dr. H. thinks, may probably be referred to a combination of causes, rather than to any single one. These are mainly the great improvements that have taken place in living during the last thirty years, and the increased comforts of life that are now enjoyed by every class of the community.

ART. 2. *Cases of Trachelotomy; read before the New Hampshire Medical Society.* By Dr. Twitchell, of Keene.—The operation in these cases, three in number, was performed for the removal of foreign bodies, which had been accidentally introduced into the trachea: Successful in each instance.

ART. 3. *The Influence of Temperature upon Mortality.* By Charles E. Ware, M.D.—The object of this paper is to illustrate by means of tables, prepared from the bills of mortality kept in Boston, and from records of temperature made by Dr. Hale of that city, the correspondence between the average temperature of different years, or of the different seasons of different years, and the mortality of the same years. The general impression derived from these tables is, that the warm months and years are more favorable to health than the colder. When, however, the winter months of different years are compared, the coldest seasons are found to be most favourable to health. More extensive observations are requisite to establish any definite opinion.

ART. 4. *Dropsy of the Fœtus. Congenital Hydrocephalus, Ascites, (Ascites) and Anasarca; read before the Boston Society for Medical Improvement.* By W. Channing, M.D.—Dropsy in the fœtus derives its interest principally from its influence upon the process of labour. Five cases are given by Dr. C.; three of hydrocephalus alone, one of hydrocephalus complicated with ascites, and one of universal dropsy of the fœtal body. Dr. C. refers judiciously to the expediency of making anatomical examinations of the bodies of still-born children. It is generally easy to obtain permission to make such examinations. They are often desired, and if physicians would perform them they might often derive from them curious and perhaps valuable pathological knowledge.

ART. 5. *Stricture of the Œsophagus.* A paper read before the Boston Society for Medical Improvement. By Henry G. Clark, M.D.—Strictures of the Œsophagus are of three kinds, the *Spasmodic*, the *Inflammatory*, and the *Scirrhus* or *Malignant*. The first of these requires little or no treatment; the latter is benefitted by none; the second or the inflammatory is consequently of the greatest practical importance. Dr. C. relates a case which he succeeded in relieving by dilating the strictured part. He employed a hollow elastic bongie, upon the shaft of which an oval bulb of ivory was slid, leaving about an inch of the smaller extremity free for the purpose of a director. The bulb was secured to the shaft by gum mastic, and a rivet passed through its centre. It

was armed with an untempered iron wire, which passed down to the centre of the ivory bulb, being there arrested by the rivet.—Under the use of this instrument, the bulb of which was regularly increased in size, the patient gradually improved. In October 1842, somewhat less than four years from the commencement of the treatment, her œsophagus had regained nearly its original size, and her health, strength and considerable colour had been re-established.

ART. 6. *Fiske Fund Prize Dissertation of the Rhode Island Medical Society. By Usher Parsons, M.D., Providence.*—An interesting essay of fifty pages, upon the causes, character, and nature of the diseases of the spine, both structural and functional, and the best mode of treatment to be employed in each. After some preliminary anatomical and pathological remarks, the author enters upon the consideration of the several spinal diseases, which he discusses in the following order: 1, Lateral Curvature of the spine, its causes, symptoms, diagnosis, prognosis, and treatment; 2, Angular projection of the spine, commonly called humpback; 3, Excavation, or posterior Curvature; 4, Incurvation, or anterior Curvature; 5, Richets and Mollities Ossium; 6, Lumbar or Psoas Abscess; 7, Injuries of the Spine; 8, Inflammation of the cancellated structure of the Vertebrae, and of the intervertebral substance and surrounding membrane; 9, Spine Bifida, or Hydro-Rachitis; 10, Exostosis; 11, Diseases of the Spinal Cord; 12, Spinal Irritation.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. 27, Nos. 14, 15, 16, 17, November, 1842.

Idiopathic Metritis and Peritonitis. By J. A. Allen, M.D., Middlebury, Vt.—A fatal case excited by the male practice of a Thomsonian quack.

Hydrophobia. By Wm. Stockbridge, M.D., of West Feliciana Parish, La.—Dr. S. relates a case of Hydrophobia which terminated fatally under his treatment. The patient had been bitten

three years previously by a dog supposed to be rabid. He had also been bitten three weeks before his death by a dog that was not rabid at that time nor two months subsequently. Dr. S. cites various medical authorities, to prove that numerous other causes are capable of producing hydrophobia, attended with symptoms exactly resembling those occasioned by the bite of a rabid animal;—that the disease has resulted from the bite of a perfectly healthy dog;—and that three, four, twelve, eighteen, twenty, and even thirty years are stated to have sometimes intervened between the reception of the bite and the development of the malady.

Nos. 18, 19, 20, 21, December, 1843.

Hot Air and Sulphur fume Baths. By Silas Durkee, M.D., Boston.—Dr. D. states, that in the use of these agents in his private hospital he has been guided by the principles detailed in Dr. Green's treatise of diseases of the skin. He relates a chronic case of *Eczema Impetiginodes* which was cured by these means.

[Respecting Dr. Green's work, to which Dr. D. acknowledges his obligations, we have observed the following remarkable statement in the *Provincial Medical Journal of January 21, 1843*: "The compendium of Dr. Jonathan Green published as an *original* work, dedicated to Sir Henry Hallford, and highly lauded by every section of the medical press, is a *mere translation, from beginning to end, of the Abrégé Pratique des Maladies de la Peau*, by MM. Cazenave and Schedel. A few original cases, it is true have been added by Dr. Green, and here and there, at the commencement of a chapter, we find a few lines of introductory matter; but with these exceptions, the whole work, from beginning to end,—the arrangement of cutaneous diseases,—the description of symptoms and treatment—the order of the several chapters,—and the well known essay on the syphilides,—the *whole*, we repeat, is a mere translation of the work of M. Cazenave."]

Nos. 22, 23, 24, 25, January, 1843.

On the use of Belladonna. By Daniel Mowe, Lowell.—The power of Belladonna, says Mr. M., to arrest the secretion of milk in the female breast, is among the most important of its qualities.

If the mammae be covered with the leaves ten days or more, beginning on the day of the accouchement, no milk will be secreted, and in this way mammary abscess may often be prevented.—When applied to one mamma only, it completely prevents secretion in that, while the other secretes abundantly. These facts, Mr. M. states that he has ascertained by ten years' experience.—His mode of using Belladonna is to take two ounces of the leaves, soak them in rum and water a little above blood-heat, spread them on a cloth, lay over them a thin gauze, keep them in place by quilting them well together, applying them thus prepared to the mamma, and supporting the whole by a suspensory bandage, passed over the neck and under the breast. The poultice should be kept constantly warm and moist.

In a postscript to his paper, Mr. M. states, that he has accidentally ascertained that in case of metastasis of mumps in females the ovarium becomes affected instead of the mamma (before the mamma) which suffers only sympathetically with the ovarium.—How this discovery was made, is not stated.

Hysteria. By Edward Warren, M.D.—A single case, occurring in a girl of eleven years of age, and apparently not arising from uterine irritation. Cured by mustard poultices, aperients, and tonics.

Neurology.—Minutes of a series of experiments performed by Dr. Jos. R. Buchanan, in the presence of a committee of gentlemen, consisting of Drs. B. F. Joslin, J. H. Griscom, C. L. Mitchell, and S. Forry, for the purpose of determining the truth of Dr. Buchanan's *system of Neurology*. To Dr. B., we are informed in this paper, belongs the *distinguished honor* of being the first individual to excite the organs of the brain by agencies applied externally directly over them. The object of the experiments here detailed was to modify the function of vision by the excitement of those cerebral organs which affect it; to prove that a highly impressible individual will receive an influence from touching any part of the head of another person, which will reproduce in himself the specific action of that organ that is touched; and lastly, to show what effect could be produced on the circulation by the excitement of different organs or parts of the brain.

We have always considered Mesmerism, or the *system of Neurology* as it is here called, one of the most contemptible of the numerous bubbles which the knavery and folly of the present day have clubbed their forces to inflate. The *science* of craniology we regard as but very little better. It was a happy thought to unite these two kindred departments of philosophy. The advocate for either one of them will in general be found a *highly impressible individual* with regard to the merits of the other: "Qui Bavium non odit, amet tua carmina, Mævi." The miracles of Dr. B. are similar to those which persons having a taste for such sublime studies may, for twenty-five cents, see performed, in almost any of the cities or villages of our enlightened country, and which are now so commonly and so scientifically detailed in the newspapers.

AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

New Series, No. 9, January, 1843.

ART. I. *Report of Surgical Cases treated at the Pennsylvania Hospital. By Geo. W. Norris, M.D., one of the Surgeons.*

Non-malignant Mammary Tumour of four years standing—Extirpation—Cure.—The patient was a young woman, ætat. 23, of comparatively good health. After the operation, she suffered from attacks of erysipelas, as well around the wound as on the back, abdomen, legs, arms and face. She was treated by a careful use of blue pill and mild cathartics, together with neutral or effervescing mixtures. The parts affected were bathed with soap liniment, and in consequence of her great debility, tonics and nourishing food were administered. March 25th, twenty-three days after the operation, a large abscess over the lower part of the back was opened. On the 31st, abscesses on both upper extremities above the elbow were opened. Other large collections of matter, all resulting from the erysipelas, were subsequently laid open. She left the hospital in good health about two months after the operation.

Aneurism by Anastomosis—Ligature—Cure.—Two needles were passed transversely beneath the base of the tumor, which

was a little in front of the anterior fontanelle, taking care that they should enter, and pass out a little distance beyond the diseased structure, after which a ligature was drawn around its base sufficiently tight to strangulate it. Two days afterwards the pins were removed, and a poultice of slippery elm applied to hasten the separation of the slough. This came away on the following day, leaving a healthy ulcerated surface, which was soon cicatrized.

The following are titles of other interesting cases in Dr. Norris' paper:—

Compound dislocation of the first, upon the second phalanx of the Thumb—Reduction impossible—Resection of the head of the first phalanx—Cure.

Varicose Ulcer—Davat's operation—Severe inflammation—Cure.

Fractured thigh of twenty-one day's standing—Union delayed by motion at sea—Firm union thirty-eight days after the application of Desaults' apparatus—Re-fracture during convalescence—Renewal of the treatment—Cure.

Dislocation of the radius forwards upon the humerus, with united fracture of the ulna in its upper third, of eight months' standing—Resection of the extremities of the fractured bones—Failure.

Fistula in Perineo following a fall—Operation—Cure.

Fore-arm torn off by machinery a little below the elbow—integument entirely stripped from the arm—Amputation at the shoulder joint—Cure.

Fore-arm torn off by machinery at its middle part—Fracture of the humerus of the same side—Amputation—Cure.

Dislocation of the shoulder of four weeks' standing—Reduction.

Dislocated shoulder of seven weeks' standing—Reduction followed by inflammation and suppuration about the joint—Cure.

Dislocation of the humerus into the axilla of ten weeks' standing—Unsuccessful efforts at reduction.

Compound fracture of the cranium with depression, unattended by symptoms of compressed brain—Application of the trephine—Cure.

Varicose aneurism at the bend of the arm—Ligature of the ar-

tery above and below the sac—secondary hemorrhages with a return of the aneurismal thrill on the 10th day—Cure.

ART. II. *Practical Observations on Chorea.* By Charles C. Hildreth, M.D., of Zanesville, Ohio.—Dr. H. says that eight cases of chorea, all in females, and all, except two, under the age of puberty, were successfully treated by him in from three to six weeks. For the cure of a majority of the cases, he thinks, he is indebted to the *Cimicifuga*. His dose of the root in powder is a teaspoonful three times daily in syrup. But he prefers giving the saturated tincture, one or two drachms at a dose, or the strong decoction with spices and a little brandy.

ART. III. *An Inquiry into the Pathology and Treatment of Varices.* By John Watson, M.D., one of the Surgeons to the New York Hospital. From p. 36 to p. 81.—This is an excellent paper on a perplexing subject. When a varicose limb is free from complication either with ulcers, eruptions, local inflammation, or constitutional disturbance, Dr. W. recommends the following treatment:—Take a common wax bongie, somewhat larger than the medium size, cut it into pieces of an inch or two in length; secure these at the detached points along the course of the varices, (longitudinally where the vein is straight, transversely where it is thrown into tumors,) by means of small adhesive straps. Then secure the whole with a common roller, laced stocking, or starched bandage, which should be applied as tightly as the patient can conveniently bear, the ordinary bandage, or starching being the best for the first five days; and the more permanent application afterwards, as soon as the swelling which usually accompanies the varices has subsided.

If there be, however, an ulcer, eruptions, or hemorrhage, &c., first, treat the one, or the other as independent affections, and after curing or relieving these, attend to the varices, by attempting to effect their gradual and permanent diminution.

ART. IV. *Remarks upon the cases of Small Pox admitted into the city Hospital [Philadelphia] during the years 1840, 41, and 42.* By Thomas Stewardson, M.D., Physician to the Institution. From experiments made by Dr. S., it appears that the application of mercurial ointment prevented more or less the perfect maturation

tion of the small pox pustules, in cases where the eruption had not advanced beyond the third or fourth day.

ART. V. *A Nasal Operation for the removal of a large tumour filling up the entire nostril and extending to the Pharynx.* By *Valentine Mott, M.D., New York.*—"Augustus McBurth, cabinet-maker, aged 32, born in Schoharie county, New York, ten years ago felt a stoppage in his left nostril, accompanied with a dull aching pain, which was much aggravated on taking cold. About one year from the commencement of these symptoms, a tumour made its appearance in the nostril of the same side. At first it was of a deep red colour; but it gradually assumed a lighter hue, and would occasionally project beyond the anterior opening of the nasal fossæ, especially in damp weather. At this stage of the disease he came to this city, and placed himself under the care of a surgeon, who made several attempts to remove it by forceps; but such was the hemorrhage that accompanied each attempt, that it was deemed unsafe to make any further trials to remove it. After remaining in the city three days, he went to an adjoining state, where several trials were made to remove it by means of a ligature; but as each unsuccessful effort seemed to impart only fresh vigour to its growth, he determined to submit to no further treatment, except to have portions of it removed from time to time, when it should become inconvenient from its size. In 1836 he removed to this city, where parts of it were from time to time removed by forceps and ligature, each attempt being attended with much pain and hemorrhage. His sufferings had now become so exceedingly acute that for one year he could not sleep in the recumbent position. There was a feeling of distension conveying the sensation of a wedge forcing forward the jaw bone. In March, 1841, he gave up his business, and urged by the intensity of his sufferings he was induced to submit to one more trial for its removal by ligature. The wire was in his nose for 11 days, but no benefit resulted from its application. He thinks that from first to last, at least 500 attempts were made to remove it, by about 50 practitioners. In June he applied to me for relief.

"The tumour anteriorly and posteriorly, was so firm and dense that very little impression could be made upon it by forceps when

firmly grasped. After trying several times to get a wire through the nose about the posterior part of the tumour, and getting firm hold of the anterior part with forceps, and the part below the palate with the vulsellum, without being able to make the least impression on it, I determined upon the following operation. Having for years been in the habit of recommending a similar one for the removal of the inferior turbinated bone, when affected with carcinoma.

“On *July 8th*, 1841, I commenced an incision through the soft parts a little on the side of the mesial line of the internal angular process of the os frontis, and extended it downwards to the upper lip, which was divided about three lines from the angle of the mouth. Two flaps were then reflected: the inner including the cartilaginous parts of the nose, and the tissues covering the os nasi of the left side; the outer laying bare the bone as far as the infra-orbital foramen. The anterior part of the tumour was now somewhat more distinctly seen, and the nasal cavity was farther exposed, by sawing vertically through the os nasi, as far as the transverse suture, so as to avoid the descending plate of the ethmoid. The superior maxillary bone was now divided in a line from the upper part of this cut to a point opposite the second bicuspid tooth, and on a level with the floor of the nostrils. Another section was made from the termination of the last, extending horizontally inwards towards the vomer. The osseous parts comprising the os nasi, a considerable portion of the superior maxillary bone, and the os spongiosum inferius were then detached. The connections of the tumour were partially separated; but the disease was so extensive, that a part had to be removed through the anterior opening, before the posterior attachments could be liberated. These having been detached, the larger portion of this extensive disease, which passed into the pharynx and completely plugged up the posterior nares, was removed by introducing through the mouth a large curved vulsellum and forceps, and seizing the mass as it descended into the pharynx.

“*May 29th*, 1842. There is no appearance of any return of the disease, and the patient enjoys better health than he has done for ten years, and works at his trade.”

ART. VI. *On the Meteorology of Hemorrhage.* By B. F. Joslin, M.D., of the city of New York.—The object proposed by Dr. J. is to examine, among the various causes whose combined influences determine the time where a spontaneous hemorrhage shall occur, whether the condition of the atmosphere has an influence so great as to be detected by a careful comparison of medical and meteorological observations. Daily observation of meteorological facts during the greater part of fifteen years has so far convinced Dr. J. of the existence of such an influence, as to induce him to make a numerical estimate for obtaining the average results in relation to a considerable number of cases. These results he has set forth in two tables, one comprising twenty-seven cases of uterine hemorrhage, the other the same number of cases of hæmoptysis.

ART. VII. *Plastic Operations.* By J. Pancoast, M.D., Prof. of Anatomy in Jefferson Medical College.—In this paper Dr. P. details the results of operations exhibiting the application of the principles of Plastic Surgery, to the restoration of lost portions of the external ear, of the eye-lids, and lips.

ART. VIII. *On the Signs of Pregnancy.* By T. Romeyn Beck, M.D., Prof. of Mat. Med. in the Albany Medical College. We have here a condensed analysis of the principal facts mentioned by different writers in late publications, respecting the following signs; 1. Peculiar Sensations in the Breast; 2. Suppression of the Menses; 3. Breasts,—Areola; 4. Abdominal Enlargement; 5. Motion of the Fœtus; 6. Lividity of the Vagina; 7. Auscultation; 8. State of the Urine. The value of Auscultation is more and more appreciated. The other signs are valuable as accessory ones. At advanced periods, actual examination of the parts seldom fails to indicate their real condition.—The signs which are uncertain are mostly so in the earlier stages, precisely when doubts should always be entertained in medico-legal cases.

ART. IX. *Remarks on a Species of Sore Mouth peculiar to Nursing Women.* By B. Waller Taylor, M.D., of Monticello, Florida.—After having tried various tonics, vegetable and mineral,—and laxatives, with only partial success, Dr. T. has found

that equal parts of the flowers of sulphur and cream of tartar, administered in broken doses, two or three times a day, so as to keep the bowels in a soluble state, constitute the best treatment as regards internal remedies. The combination of sulphur and cream of tartar appears to have almost a specific influence over this disease. The best external application, he thinks, is borax, either in the form of solution sweetened with honey or loaf sugar, or finely pulverized with an equal quantity of loaf sugar, and applied in the same manner as advised by Dr. Dewees, in cases of aphthæ in children, only in larger quantity. He has also derived great benefit from a weak solution of nitrate of silver, as a wash. In cases attended with considerable exhaustion of the system, the sulphur and cream of tartar should be only used to the extent of obviating costiveness, if it exist; and tonics, such as the precipitated carb. of iron, and the compound tincture or infusion of cinchona, combined with elixir of vitriol, should be given in well regulated doses. Porter is also a good and useful tonic in such cases. Should the case be complicated with diarrhœa, the diet should be bland and farinaceous, as arrow-root gruel, rice-gruel, &c., and the drinks mucilaginous; and an anodyne, as a dose of the sol. acet. morph. or of laudanum, should be given, and repeated *pro re nata*. In cases that prove refractory, it will become necessary to wean the child, and then a speedy cure will take place.

ART. X. *Case of death from extensive Intestinal and Peritoneal Inflammation, resulting from a perforation of the Intestinal Coats, occasioned by a Calculus lodged in the Appendix Vermiformis.*—By J. F. Peebles, M.D., Petersburg, Virginia.—Many cases of calculi in the intestinal canal are recorded in books and journals. This appears to be the first account of one in the *Appendicula Vermiformis*.

“The calculus belonged to the mulberry class; it was nearly circular, more than an inch in diameter through its widest portion, with a very irregular surface. Surrounding it, lodged in the interstices, were a number of tomato seed, and several of those of the currant, some of which had evidently remained there for a length of time, since they were partially incrustated with the cal-

careous matter. On sawing into it, after passing through a thin but firm crust of stone, the saw suddenly sunk into a soft substance. On laying it entirely open, the calculus was found to be a thin incrustation, filled with a fawn-coloured and dried matter, light and spongy to the touch ; it had evidently been some organic substance, and containing, as it did, several particles made up of distinct fibres, which were perceptibly elastic, the inference is fair that it was of animal origin, perhaps a bit of beef which, defying the powers of mastication, had become accidentally lodged in the appendix, and thus, in the course of time, incrustated.—This substance was easily scooped out, and when removed, the cavity left plainly proved that it had been the nucleus, for the crust of stone being of the same thickness throughout, its shape was found to have entirely determined the external conformation of the stone.”

THE MEDICAL EXAMINER.

Vol. 1, Nos. 41, 42, 43, 44, October, 1842.

A report of cases of Puerperal Fever, illustrative of the Malignant Epidemic that prevailed in the Lying-in Department of the Philadelphia Hospital, during the months of March and April, 1842. By M. W. Wilson, M.D., Resident Physician.—Five cases, four of which terminated fatally. The bodies of three were examined after death ; in each the peritoneum presented traces of inflammation, and the parietes of the uterus were softened. “In none of these cases,” says Dr. W., “could large depletion be practised with benefit. The low form of the disease, which was apparent from the feeble and frequent pulse, and also the known typhoid tendency of the house, as indicated by the presence of erysipelas and typhus fever, went far to contra-indicate its use.”

Case of Retention of the Fœtus in Utero, three years and ten months after the full terms of Utero-gestation. By Thomas Miller, M.D., Professor of Anatomy in the Columbian Medical College.—In this case, most of the bones of a full grown fœtus were

found in the uterus of a female twenty-two years of age, who died three years and ten months after the natural term of uterogestation. Labour-pains had come on at the proper season, but ceased in a short time, without effecting the expulsion of the fœtus. In the autopsy, the uterus was found firmly adhering to the surrounding parts; its body and fundus were so changed as scarcely to be recognized, being flabby and softened by the progress of disorganization; its neck was nearly healthy; its mouth was distended posteriorly into a pouch, large enough to hold a gill, which was filled with small bones and disorganized remains of the fœtus. A fistulous opening, an inch in diameter, existed between the uterus and rectum.

Nos. 45, 46, 47, 48, November, 1842.

A case of Malformation of the Heart and Great Vessels, attended with Cyanosis; with remarks upon this affection.—A paper read by Dr. West, before the Pathological Society, October 31, 1842. Berard, in his article upon the Abnormal Anatomy of the Heart, in the *Dict. de Médecine*, argues against the doctrine that Cyanosis is owing to the simple presence of black blood in the vessels. He can understand, he says, why certain parts to which the artereal blood habitually gives a vermilion tint, such as the lips and cheeks, should assume a dark colour when a mixed blood is in circulation through the vessels, even without any retardation of its course; but he is not able to see why the skin of the rest of the body, which is not sufficiently vascular to receive a red tinge from the artereal blood circulating through its vessels should become blue when this fluid happens to be changed in colour. It ought to remain white, he contends, in the one case as well as the other, if there be no modification of the circulation.—To what then is the occurrence of Cyanosis to be attributed?—Evidently, says Berard, to the difficulty of the venous circulation, and to the stasis of blood in this order of vessels.

In support of this opinion various facts have been stated by Breschet, Bertin and others. Thus Cyanosis has in some instances been absent where a communication was found to exist between the right and left hearts, and in others, it has been pre-

sent where there was no such communication. The case detailed in the present paper is favourable to the same view.

The subject of it was a boy, aged 8 years, of full size, well developed and possessing ordinary intelligence. At his birth, which was at the full time, his skin was slightly blue, but this appearance did not assume a permanent or marked character, so as to attract general attention, until after an attack of pertussis, which he had when about fifteen months old. From this period the discoloration became fixed and very intense, particularly about his face and hands. His parents stated, that when he was sitting erect and perfectly quiet, they have at times known his skin, for a few minutes, to lose entirely its characteristic dark hue. He was attacked by violent general convulsions and died suddenly.

Upon examining his body, the lungs, of full size, were found to be natural, with the exception of being congested throughout with very black blood. The heart was remarkably tinged with dark blood; its cavities were all dilated and their walls thickened, those of the right side much more so than those of the left.—The foramen ovale was closed. At the posterior end of the base of the inter-ventricular septum was an opening communicating with the two ventricles and with the aorta. The root of this vessel, which was embraced within the limits of the opening, had an origin from each ventricle. Its valves were all perfect, and situated just at the mouth of the opening. The trunk of the pulmonary artery consisted of a conical fibrous looking projection, about half an inch high, and arising from the heart by a broad and spreading base. It entered at a somewhat acute angle the side of a straight vessel, two and a half lines in diameter, constituting its right and left branches. The passage through the trunk commenced at the superior left corner of the right ventricle, and was so narrow as to be scarcely capable of admitting a large pin.—Very little blood could possibly have reached the lungs through it; their main supply was furnished by the ductus arteriosus, which was still open. The consequence of the whole arrangement of the heart and its vessels must have been considerable delay of the blood in the right cavities of the heart, producing their dilatation, and also preventing the free admission of blood into them,

together with congestion of the whole venous system, and especially of the veins of the skin, when it exhibited itself in the character of Cyanosis.

Medullary Sarcoma of the Liver perforating the Peritoneum ; read by Dr. Pepper, before the Pathological Society.—"The symptoms of Cancer of the Liver are, in many instances, extremely obscure ; one or more tumours projecting below the margin of the ribs, when attended by the cancerous cachexia, render the existence of the disease highly probable ; but unfortunately, these symptoms are not unfrequently absent, as was the case in the present instance. The pain complained of by the patient for the last few years, may be fairly attributed to the cancerous disease ; but it is also true, that the disease not unfrequently runs on to a fatal termination, unattended with pain or even jaundice.

The yellowness of the skin in this case did not supervene until three weeks before death, and was most probably caused by the rapid encroachment of the cancerous mass upon the neck of the gall-bladder and the commencement of the hepatic duct : Several cases of a precisely similar character are reported by Andral in his *Clinique Medicale*."

Cancer of the Stomach and Pancreas: Read by Dr. Pepper at the same meeting of the Pathological Society.—From the morbid appearances in this case, observed after death, it was by no means improbable that the disease commenced in the stomach, and thence, by means of the lymphatics, extended to the pancreas and adjacent parts, producing pain in the loins and functional disorder of the kidneys. In cancer of the stomach, the matters vomited is frequently very offensive, and the constipation is also very obstinate ; but in the present instance there was fecal vomiting, and the constipation such as is rarely seen, except in cases of mechanical obstruction. Both of these symptoms are explained by the adhesion of several of the convolutions of the intestines to the scirrhus mass.

The diagnosis of scirrhus of the pancreas is often rendered very obscure by the intimate connexion between this gland and other more important organs. Thus the head of the pancreas when much enlarged presses upon the duodenum, or obstructs the duc-

tus communis choledochus, causing vomiting, jaundice, and other symptoms which are generally attributed to disease of the stomach or liver. The only positive sign of this disease is a deep-seated tumour immoveably fixed behind the umbilicus. The tumour which generally attends scirrhus of the pylorus is moveable, more superficial, and situated above and to the right of the umbilicus.—But the two diseases are not unfrequently combined, through the medium of the lymphatics or by direct adhesion, and the above distinction therefore loses much of its importance.

Nos. 49, 50, 51, 52, December, 1842.

Case of Idiopathic Tetanus cured by Spirits of Turpentine ; by Q. Gibbon, M.D., Salem, N. J.—The patient, aged about four years took in the course of four days about forty grains of calomel, fifteen grains of opium, and fifteen tea spoonfuls of laudanum; yet under these large doses he grew worse, the opisthotonos, which was at first paroxysmal, becoming permanent. The appearance of copious black foetid discharges upon the fourth day from the first administration of turpentine, seemed to be the signal for the abatement of the tetanic symptoms. The turpentine was given in doses of a tea spoonful every two hours.

Audition restored by the removal of a Tumour from (the) Hyo-Thyroid Region : by Daniel V. Folts, M.D., Springville, N. Y. The patient, a lady in middle life and of a scrofulous constitution, had for eight or nine years suffered more or less inconvenience from a tumour over the larynx, and during the last 18 months had been deprived entirely of the sense of hearing in her right ear.—The deafness was preceded by a sensation of throbbing in the ear, synchronous with the systole of the heart, and which by pressure upon the common carotid would almost entirely cease, the power of hearing being for the time much improved. The tumour, which had lately increased rapidly, was of the size of a hen's egg, firmly attached by its base to the os hyoides about the mesial line, and descended obliquely over the right fronto-aspect of the thyroid cartilage.

The tumour was dissected out, and immediately upon its removal the patient declared that she could hear as well as ever.—

Several months after the operation, up to the date of the report, her hearing continued good. No explanation of the case is offered by the author.

Operation of Lithotripsy.—Breaking of the Instrument in the Bladder.—Death of the patient. Reported from the Hôtel Dieu of Paris, by F. Campbell Stewart, M.D.—The instrument employed was Heurteloup's *brise-pierre fenêtrée*, the female branch of which broke off about one inch from its extremity, and fell into the bladder. No attempt was made to extract the broken piece, and it was determined to have recourse to lithotomy as soon as the patient should be in a condition to render the success of the operation probable. The patient died about ten days after the accident, and before any thing was done for him, his death resulting apparently from inflammation of the kidneys.

"In this case," says Dr. S., "we have an instance of the repetition of an accident which has already happened more than once; and as it is calculated without explanation, to do serious injury to the cause of lithotripsy, I may be permitted to offer a few extenuating remarks.

"The patient was at the period of his admission into the hospital in such a condition as to preclude from the mind of a cautious surgeon the idea of an immediate operation, either by lithotomy or lithotripsy. He was exceedingly irritable, and even complained of constant pain in the regions of the liver and right kidney, proving that inflammation already existed, either in a chronic or incipient stage. If, however, it was judged indispensable to relieve him as soon as possible of his stone, the question arose as to which of the operations would be most applicable to his case; and here, I think, there was not ground for a moment's hesitation. Lithotomy should undoubtedly have been preferred; and for the reasons, that the stone was not too large to be removed through the perineum, whilst it was too hard to be easily broken by the *brise-pierre*; and in the former case, the source of irritation would have been at once and entirely removed; whereas, by the latter process, a number of hard, angular pieces of stone would be substituted in place of one large mass, which acting as a constant

source of irritation could but complicate the operation, and thus compromise its success.

“Civiale has long since declared his opinion, which he repeated to me a few days since, that the operation of lithotripsy is inapplicable in most cases where the kidneys are diseased, and he is always cautious not to operate until such diseases have been subdued or removed.”

THE WESTERN JOURNAL.

Vol. 6, No. 4, October, 1842.

ART. 1. *Injuries of the Superior Extremities*: by W. L. Sutton, M.D., Georgetown, Ky.

1st. *A gun shot wound in the axilla*, illustrating the fact, that a sudden obliteration of the principal artery of a limb is not necessarily followed by a marked diminution of temperature in that limb.

2d. *Arm torn off, together with the scapula; injury to the abdomen; death on the 11th day*:—There was no hemorrhage from the lacerated arteries. The patient never complained of the shoulder, and it was only in the last days of his life that sloughing showed itself in the wound, while from the third day after the accident there were considerable pain and great disorder in the bowels. Dr. S. thinks, that this affection of the bowels arose not as a result of the injury done to the arm, but in consequence of the violence inflicted on the abdomen, which had been severely contused.

3d. *Compound fracture of the humerus*.

4th. *Humerus fractured by a musket-ball*:—*Artificial joint*.—The patient was wounded by a musket-ball passing through the os humeri immediately above the condyles. His arm got well with the elbow stiff, and an artificial joint at the place of fracture.—This joint supplies the place both of the natural joint, and of the rotatory motion of the fore-arm, in a very perfect manner, and the patient is able to do a good day's work at any kind of labour. “I mention this case,” says Dr. S., “to show what nature will

sometimes do for a man, and that an artificial joint is not always such a bad thing."

5th. *Compound dislocation of the elbow—mortification—amputation—recovery.*—The condyles of the humerus were forced through the skin in front of the elbow-joint. After amputation, it was ascertained that in their passage they had torn asunder the humeral artery, the two cutaneous nerves, and the veins in the front of the arm.

6th. *Dislocation of the elbow—sloughing of the fore-arm—artificial joint.*—The condyles of the humerus were thrown forward upon the fore-arm. Necrosis of a large portion of the ulna took place, which portion was removed. "The radius gave way about the middle." For about two and a half inches below the elbow-joint, the soft parts remained sound, the joint flexible.—The fore-arm is shortened about two inches; the ulna and radius have not united; the patient is in good health, but has no command of his fingers. "It is too soon to say what will be the result of the case."

7th. *Fracture of the humerus—compound fracture of the fore-arm—laceration of the external interosseal artery—arm saved.*—"In about five months the patient was well (several pieces of bone having been removed in the mean time) with no deformity in the arm; the elbow-joint perfect; some deformity in the fore-arm, occasioned by a neglect or inability to keep the fragments of the radius duly separated from those of the ulna; a very imperfect rotatory motion of the fore-arm; an inability to shut the hand firmly, but with sufficient use of it to enable him to do a full day's work at spinning."

8th. *Fracture of the humerus—fracture of the fore-arm—mortification—amputation—recovery.*—A case similar to the preceding, and apparently less severe, but requiring amputation in consequence of the patient's constitution being less able to resist injury.

9th. *Fracture of the ulna—dislocation of the superior end of the radius—deformity.*—The superior end of the radius was thrown out on the outside of the tubercle of the humerus. The ulna had been broken at about one third its length from the el-

bow, and was united at a considerable angle so as to be shortened by nearly an inch. The case was of three weeks' standing when seen by Dr. S., and as it was doubtful whether the cavity of the semilunar notch could remain so long in a condition fit to receive the head of the radius, no attempt was made to relieve the patient.

10th. *Fracture of the scephoid cavity of the radius—fracture of the lower end of the ulna.*—The patient recovered with no absolute deformity, but with a want of symmetry in the arm.

11th. *Fracture of the glendid cavity of the radius—dislocation of the wrists.*—Treated according to Dr. J. R. Barton's mode.—“Having the arm properly extended, I applied a roller upon the hand and fore-arm, securing a compress a third of an inch thick, and two and a half square, on the carpus and back of the hand, and a similar one on the palmar side of the radius, just above its carpel extremity, in such a way that the superior extremity of one corresponded with the inferior edge of the other. Over these I applied two thin but firm wooden splints, long enough to extend from the elbow to the points of the fingers. After a week the dressings were removed and re-applied daily, pressing the fractured portion of the radius firmly so as to prevent displacement, whilst the fingers and wrist were fixed and straightened; and after ten or twelve days adding pronation and supination to these motions. At the end of treatment the wrist was found perfectly symmetrical.

ART. II. *Miscellaneous Cases: by Samuel Hogg, M.D., late of Tennessee.*—“These cases have nothing novel or particularly striking to recommend them, but they will be read with satisfaction by the physician engaged in practice.” *Ed. of Western Journal.* They consist of two fatal cases, one supposed to be bilious colic, the other *milk sickness*; no examination of either after death; and of three cases of midwifery of no special importance.

No. 5, November, 1842.

ART. I. *A case of Compression of the Brain, reported to the Medical Society of Tennessee, at its 13th annual meeting in May, 1842. By John R. Wilson, M.D., of Davidson County.*—The

patient, 23 years of age, of a scrofulous diathesis, was attacked with severe pain in the left side of the head. During the course of her illness, a hard tumor, circumscribed and slightly elevated, was discovered on the left side of the os frontis, near the junction of the parietal bone. Becoming soft, the tumor was opened by a large incision and discharged a considerable quantity of purulent matter. Complete paralysis of the right side occurred a few days subsequently, attended with laborious breathing and stupor. A free crucial incision was made through the tumor, and on examination a portion of the pericranium was found separated from the skull, and a small hole was discovered sufficient to admit the end of a probe through the first table of the bone, but no farther. A portion of the bone being removed by the trephine, four or five ounces of purulent matter were discharged. This was in a short time followed by a return of the power of distinct articulation, and by a speedy restoration of the patient's health, which has continued good up to the present time,—a period of more than 14 years.

ART. II. *History of a fatal case of Chronic Spinitis.* By Calvin Smith, M.D., of Toledo, Ohio.—The patient had been attacked about four months previously by rheumatism, and a considerable impairment of voluntary motion in his extremities, more especially the inferior. Recourse was had to various remedial means,—among others to mesmerism (*the science of neurology*), but with not much benefit. When the case was first seen by Dr. S., the paralysis of the limbs was entire, with the exception of the left fore-arm, which could be moved imperfectly. The sensibility of the extremities was also very much impaired. The patient had no power over the abdominal muscles, and consequently the alvine evacuations were effected only by the natural action of the bowels, wholly independently of the will. He could, however, void the contents of the bladder at will. He had experienced some pain a great proportion of the time in the back and extremities. Dr. S. was led to infer that the medulla spinalis was materially affected, and on examination by pressure found that much pain was produced when pressure was made over the cervical vertebræ. There was also some tenderness along the dorsal ver-

tebræ, but far less than in the cervical region. Counter-irritation along the spine was recommended, with proper constitutional treatment and a regulated diet. Three days after, difficulty of respiration occurred, in consequence, as was thought, of the spinal marrow being affected as high as the origin of the respiratory nerves; this rapidly increased and extinguished life in a few hours. On examination after death, the membranes enclosing the spinal marrow were found to be considerably injected with blood, and upon puncturing them water gushed out very freely. The state of the brain was not explored.

ART. III. *Observations on Scarlatina Anginosa, as it appeared at St. Clairsville, Ohio, in 1833. By Thomas Carroll, M.D., now of Cincinnati.*—The disease commenced in February, declined in July, but did not terminate till August. Its character changed with the state of the season, being more intense in hot than in cold weather. At first, the cases were characterised by inflamed fauces, elevated and reddened papillæ of the tongue, with swelling of the mucous membrane generally, slight salivation, headache, rigors, fever, and delirium. The fever, in most cases, was accompanied with an unusually strong and frequent pulse, and great heat of the surface, but almost altogether without eruption of the skin. On the approach of warm weather, these symptoms became united with others of a more serious character. When a patient had by proper treatment become so far restored as to resume his usual habits, some irregularity in eating or drinking, or imprudence in exposing himself to cold and wet, would bring on the following symptoms; fever, with a revival of the inflammation of the fauces, frequently travelling up the posterior nares, involving the whole pituitary membrane and the submucous cellular substance, and at length attacking the skin above, generally on the bridge of the nose. Across this part it formed a belt, which traversed one or both of the cheeks and involved one or both of the ears. From this belt the swelling spread, and commonly affected the whole face and scalp.—The colour of the inflamed skin was red, more or less approaching to a venous hue. For the first few hours it had a polished aspect, but vesication uniformly resulted in a short time, and spread

over the face and ears, but without invading the hairy scalp to much extent. This union of vesication and swelling completed every characteristic of erysipelas, and was accordingly treated as such. Nearly one half of those affected with it died, inflammation of the brain carrying them off, and that commonly within the first week or ten days after the commencement of the erysipelas.

Of the contagious nature of the erysipelas, Dr. C. entertained no doubt, and it was certain that it propagated the scarlatina anginosa. A gentleman and lady had that disease, combined with erysipelas; it proved fatal. Their children, who lived at some distance, visited them, and some days after their return home, several of them were taken ill with it. None of them had erysipelas in any form; their neighbours, however, who visited them, and became diseased in a similar way, were several of them affected by erysipelas of the face; yet no such disease took place among others in that region, who were not exposed to the contagion.

The plan of treatment adopted was, in the first place, to bleed in all cases where the patient would bear venesection, and to repeat it as often as it was admissible; in the second place, to purge with calomel and jalap, or senna and salts; and in the third place, to vomit with tartar emetic, either immediately before purging, or within a few hours after. The emetics and cathartics were repeated according to circumstances; and throughout, antimonials were given in less than nauseating doses, for the purpose of controlling the circulation, while blue ointment and poultices were applied to the blistered surfaces.

Out of two hundred cases healed by Dr. C., fourteen terminated fatally.

No. 6, December, 1842.

ART. I. *The Northern Lakes, a summer resort for invalids of the South.* By Daniel Drake, M.D., Professor in the Medical Institute of Louisville.—“This discourse, embodying some of the observations made during a tour of medical inquiry in the past summer,” we are informed by its able and accomplished author, “was first delivered in the Hall of the Medical Institute of Louisville, before the pupils and a part of the people of the city;

which will account to the reader for its rhetorical embellishments. Many things will be found in it, which are not strictly professional; but as the object of the author was to render a new region available to invalids, he deemed it necessary to show, that those who are in health may visit it with pleasure and profit; for unless the latter go thither, it is not likely to be frequented by the former." It is an interesting paper, and calculated to be eminently useful to those who are compelled to leave home in quest of health, or who are disposed to devote a part of the summer to a delightful tour in pursuit at once of amusement and instruction.—The author has well described what he saw, and he saw every thing in his route with the eye of a man of taste, a physician, and a patriot.

ART. II. *Remarks on the diseases that appeared in Rutherford County, Tennessee, during the year 1841, and the winter of 1841, —42; being a report read before the Medical Society of Tennessee, at its annual meeting in May, 1842. By John W. Richardson, M.D.*—The first of the diseases mentioned by Dr. R. is *Parotitis*. This affection had prevailed in his neighborhood for a year, and was still prevailing at the time of writing. The most remarkable circumstance observed in connexion with it, was the occurrence in several cases of *hernia humoralis*, accompanied by headache, but without any inflammation or pain of the parotid gland. None of the persons who suffered from inflamed testes primarily, experienced a subsequent attack of parotitis; but many who had parotitis, had *hernia humoralis* as a secondary affection. The best anodyne for the distressing pain of testitis, was found to be "just as much *tartar water* (solution of tartar-emetic?) as the stomach could retain."

No case of metastasis from the parotids to the *mammæ* in women was observed; in several instances the uterus was excited to great action. In pregnant females, abortion and miscarriage were produced; and if the translation or sympathetic action took place at the menstrual period, the flow was abundant.

The month of January was warm and damp, and towards its close a very unmanageable and fatal epidemic occurred. This disease was characterized by a chill or chillness ushering in the

attack; great pain in the head; nausea or vomiting in some cases, but more frequently there was neither. In a short time reaction came on, where it occurred at all, and those who lived to experience it, became either stupid, comatose, or quite vociferous. The great majority became restless, talkative, boisterous, calling on those to whom they were most attached, pulling and scratching the bed clothes, sometimes biting their fingernails, sometimes screaming as though they were frightened.—Others lay perfectly stupid, muttering incoherently, but, when aroused, would answer a question rationally, if addressed in a sharp, quick tone. Those who died before any reaction was established, would roll from one side to the other, and toss about in every possible manner, apparently insensible to every thing about them; yet even they, when aroused, would sometimes answer rationally. In almost all the cases, the bowels were torpid and all the secretions seemed to be arrested or retained. In nearly all the bad cases, the head was drawn back on the shoulders, and the whole spine, from the head to the sacrum, was bent like a well strung bow. The tongue was generally clean at the commencement of the attack, but after the first excitement, it became covered with a short, thick, white coat. There were generally no signs of primary disease any where save in the brain, spinal cord, or ganglionic system; and in proportion as one or the other of these organs was affected, was the predominance of the symptoms peculiar to it. The greater number of cases presented a complication of the spinal and ganglionic forms. The form of the cerebral disease in some patients was phrenitis, but in the greater number it was arachnitis. The symptoms immediately preceding death were very much like those observed in children who die of acute arachnitis terminating rapidly in effusion. No *post mortem* examinations appear to have been made.

In the treatment of this disease, bleeding was generally used, but did not always appear to afford even partial relief. Emetics were always beneficial, and frequently arrested the malady at once; they were given during the headache which preceded the chill. Purgatives were of great advantage through the whole course of the complaint. Dry cupping, and friction with stimu-

lants along the spine were always useful ; and blisters to the nape of the neck produced considerable mitigation of the cerebral symptoms. Opium, however, was found by Dr. R. to be the most useful of all the remedies which he employed ; its effects were salutary, given in any form, and at almost any period.

ART. III. *A few practical remarks upon Erysipelas of the Head.* By Charles S. Tripler, M.D., Surgeon, U. S. Army.—

Dr. T. took charge of the Army Hospital at Detroit, in the middle of January, 1840. The garrison consisted of 350 officers and men. Erysipelas of the head had appeared a short time before ; one man was at the time convalescent from it in the hospital, and one was sick with the disease, who died soon after. Ten more cases occurred during the first quarter of that year ; and from that time up to last January, sporadic cases have from time to time presented themselves among the soldiers, and in the private practice of the medical gentlemen of the city.

The cause of this affection as it prevailed in Detroit, Dr. T. believes to have been the peculiar poison of typhus fever. It occurred, he says, under the circumstances in which we ordinarily expect to find typhus ; about the same proportions of persons exposed were attacked as in moderate typhus endemics ; and the symptoms, exclusive of the eruption, were very similar to those of typhus. There were, however, no cases of the usual form of typhus during the prevalence of the erysipelas.

In the treatment, blood-letting, at the onset, was of singular service, rendering the inflammation milder and checking the general morbid action. An early exhibition of emetics and purgatives, or both, was always resorted to. After this a permanent constitutional and local treatment was adopted and persevered in. The former consisted of calomel and Dover's powder in small and frequent doses, during the stage of excitement, with infusion of serpentaria, wine-whey, carb. ammoniæ, &c., during the stage of collapse ; the latter, of a strong solution of the deuto-chloride of mercury.

This latter remedy was first suggested to the author as a local application by Dr. Pitcher of Detroit, who had received it from his preceptor. It was found eminently useful, and is strongly

recommended. Dr. T. was in the habit of applying it always a little beyond the bounds of the inflammation. It produced no impression upon the sound skin, but upon the diseased integuments its effect was rapid and decisive, twenty-four hours being sufficient to cauterize the cuticle completely. It did not prevent the inflammation from spreading pretty generally over the face and head, but appeared to act as a powerful counter-irritant in relation to the brain, for after its application, notwithstanding the apparent severity of the local disease, the brain rarely, and even then but slightly, suffered. The solution employed, was composed of 20 grains of the deuto-chloride of mercury to one fluid ounce of water. It was applied with a pencil or piece of lint, four or five times in the course of a day, taking care to guard the lips, nostrils and mouth. Dr. T. considers it a much more useful topical application in erysipelas than the tincture of iodine, recommended by Mr. Davies of Hertford, England; with this latter agent he has, however, but little experience, having employed it in but two cases.

THE WESTERN LANCET.

Vol. 1, No. 7, November, 1842.

ART. I. *Observations on Encephaloid Tumors, and the consequences of their removal. By Thomas Carroll, M.D., of Cincinnati. Read before Hamilton County Medical Club.*—"That all masses," says Dr. C. "which have encephaloid matter developed in them are incurable, I have scarcely a doubt. But tumors that sometimes become encephaloid, exist for years before that takes place. It will, then, be a consideration, whether those that are suspected of becoming encephaloid should be removed by the knife. It is my opinion that they should, and under this apprehension, I proceed to detail a few facts with regard to them, which I hope will tend to confirm it in the minds of others."

ART. II. *On the distinctive traits between Irritation and Inflammation. By John P. Harrison, M.D., Professor of Materia-*

Medica in the Medical College of Ohio.—Dr. H. agrees with those pathologists who contend for the “distinct individuality” of irritation and inflammation. Their arguments, as stated by him, are, 1st, that irritation is a pathological state of the nervous function; whereas inflammation consists essentially in an excited and perverted action of the capillary vessels. 2d, Irritation is shown to be a separate morbid state from inflammation by the most approved methods of treating these affections; irritation seldom requiring, in its uncomplicated condition, evacuant means but on the contrary demanding tonic or anodyne remedies. 3d, When patients die, after suffering from constitutional or local irritation, no lesions are discovered, upon the autopsy of the body, which can be referred to a previous vascular turgescence. 4th, The suddenness with which the onset of an attack of irritation takes place, and the equal rapidity of its cessation or removal, show the discrepancy which exists between disturbance of the nervous function, and morbid action of the vascular system.

[These circumstances afford no evidence that irritation and inflammation are essentially distinct in nature; they prove only that they are different degrees or different stages of morbid action.]

ART. III. *Remarks on the nature and treatment of Chorea Sancti Viti.* By Thomas H. Roe, M.D., M. A. N. &c., of Newark, Ohio.—“Chorea,” says Dr. R., “is undoubtedly a disease of the excito-motory system, dependent upon a train of morbid associations arising in the brain or spinal cord, which extend to the sympathetic ganglia.” The plan of treatment which he recommends, is to apply a small blister upon the os coccygis, over the last ganglion of the sympathetic nerve, and three more over the three cervical ganglions. These should be kept on six hours, then taken off, and the raw surface washed every second hour with a strong solution of prussic acid, about fifty drops to the ounce. The object of the blistering is to form a new irritation at each end of the sympathetic system, and thus to break up the disordered action existing in the great nervous centres. As a preparation for the blisters, strict attention should be paid to the primæ viæ. The result of this treatment is stated to have been

extremely satisfactory, the patients upon whom it was tried being much more speedily relieved than is usual under the ordinary method.

No. 8, December, 1842.

ART. I. *Death caused by a blow on the Epigastrium, with remarks on the judicial investigation of the case.* By G. S. B. Hempstead, M.D., of Portsmouth, Ohio.—“When death is suddenly caused by a blow on the epigastrium, it is produced,” says Dr. Beck, “by injury to the vital organs through the semi-lunar ganglion and solar plexus. These ganglia formed from the nerves which support vitality, being injured or paralyzed, extend their influence to the heart and respiratory organs.” Dr. Hempstead, in the present paper, relates a case which he considers opposed to the opinion of our celebrated medical jurist. A German was killed by a blow upon the epigastrium. There was no mark of violence upon the surface of the abdomen or upon the organs within. The lungs were greatly collapsed, lying back on either side of the spine, of a leaden hue, *free from irritation* (?), bearing a strong resemblance to lungs which had never been inflated, and, to all appearance, having no air in them. The right ventricle and auricle of the heart, and their vessels, were completely filled with blood; while the left ventricle, auricle, and aorta were entirely empty. From these circumstances, and the testimony of respectable witnesses, Dr. H. “was satisfied that the circulation was arrested by the lungs in its passage from one ventricle to the other, and that asphyxia produced by the blow upon the epigastrium, had caused the death of the individual.

How far this opinion differs from the view expressed by Dr. Beck, we shall not attempt to inquire.

ART. II. *Remarks on Cynanche Maligna.* By the Editor.—The author opposes the doctrine that cynanche maligna is a modification of scarlatina. “Each,” he says, “is a distinct and idiopathic disease, and are often found, prevailing separately and distinctly, but frequently existing in union; indeed there seems to be a strong affinity existing between them, so much so, that they are usually found co-existent.” Heberden was of a different opinion on this subject, and we see nothing in the present

essay calculated to disprove the correctness of his judgment.—“It seems highly probable,” says that learned and elegant writer, “that cynanche maligna and scarlatina are both names of the same distemper, with some little variety in a few of the symptoms; and this opinion is confirmed by our finding that they are both epidemical at the same time. Even in the same family, where a number of children have been ill either together, or immediately after one another, some have had the distinguishing symptoms of the scarlet fever, and others of the malignant sore throat.”

ART. III. *An Anomalous Case of Disease.* By Joseph Walrath, M.D., Hanover, Ohio.—A fatal case, probably, as the editor of the W. Lancet suggests, of *partial encephalitis*. There was no post mortem examination of the patient's body.

THE WESTERN AND SOUTHERN MEDICAL RECORDER.

Vol. 1, No. 12, October, 1842.

Surgical and Obstetrical Cases. By A. B. Crook, M.D., of Greenville, S. C.—“In treating cases of dislocation,” says Dr. C., “when the usual arrangements for extension and counter-extension have been made, and the word is given for the assistants to act in concert, the muscles are instantaneously thrown into a state of violent and often spasmodic contraction, and this in so forcible a manner as to render it impossible to overcome it by any amount of force that could be applied, compatible with the safety of the patient. Under such circumstances, the lancet, emetic tartar, warm bathing, weights, &c., are resorted to for the purpose of producing relaxation. To these experiments, for several years, I have not found it necessary to have recourse. By throwing my patient off his guard, and using the luxated bone as a lever, I have failed in but three instances to accomplish all that, under such circumstances, could be desired. These were rather old cases of dislocation of the humerus at the shoulder joint, where it was necessary, before the bone could be restored to its proper

position, to break up the attachments it had formed with the parts that constituted its preter-natural location."

The obstetrical cases, two in number, are stated in illustration of the importance of attending to the mental feelings of parturient patients.

A Case of Laceration of the Womb, with escape of the child into the abdomen, delivered by the Cesarian operation. By N. L. McGuire, M.D. and B. W. Groce, M.D., of Talladega County, Alabama.—The child was dead when extracted; the mother died on the fourth day after the operation. "Immediately after, and even previous to, delivering the woman," say the authors, "we were under the impression that it was a case of extra-uterine pregnancy; and we should have retained that opinion, had not the post mortem examination developed a rupture of the uterus."

Selections from Foreign Journals.

ANATOMY AND PHYSIOLOGY.

On the Composition of Fibrin. By M. BOUCHARDAT.—The author of this communication is well known, as the ingenious introducer of the *gluten bread*, which promises to be one of the most important aids in the dietetic treatment of diabetes. He is at present engaged in a series of experiments on the proximate principles of organized bodies; and he has been led by them to entertain some novel views on the nature of fibrin, of which the following is a brief account.

He premises by stating that his experiments have been made upon fibrin separated from the blood by beating it with a stick, and upon the buffy coat of inflammatory blood. When a piece of the buffy coat is boiled in three or four times its weight of water, after having been well washed in cold water, it is reduced to about half its volume, and the water is found to hold in solution a considerable quantity of a gelatinous substance, which is sometimes enough to form a jelly on cooling. That this is true gelatine, without any mixture of albumen, appears from the action of the usual tests. The proportion of gelatine in the blood is extremely variable. In the blood of a person in health, it is sometimes difficult to establish clearly the presence of gelatine; but in inflammatory affections of the serous and cellular tissues, the proportion increases very greatly. This is a fact of great pathological interest.

Besides gelatine, two other substances are considered by M. Bouchardat to exist in fibrin. When a piece of fibrin is placed in water containing only 1-2000th part of muriatic acid (a mixture so weak as scarcely to affect litmus paper, or to be preceptibly sour to the taste,) it immediately swells and becomes flocculent; by a prolonged maceration the greater part is dissolved; but there remains a substance which is not attacked by an excess of the solvent, and which appears to M. Bouchardat identical with the basis of the epidermic tissues and of their horny appendages. For this substance he proposes the name of *epidermose*.

The acidulated solution appears to contain a large proportion of an albuminous compound, which is precipitated by an excess of nitric or muriatic acids, and redissolved by a still greater excess; flocculi are also precipitated by heat; and an abundant precipitate is thrown down by a solution of bichloride of mercury, prussiate of potass, and tannin. When examined with polarized light, it causes a deviation of the rays to the left. Hence this compound is regarded by M. Bouchardat as identical with the albumen of the egg; and he names it *albuminose*.

The acidulated solution, however, probably contains gelatine also; for M. Bouchardat has ascertained by a parallel experiment, that water thus acidulated

will slowly dissolve isinglass at a temperature of about 68° Fahr. This last experiment is considered by him as proving that gelatine pre-exists as such in the animal tissues (which has been denied by some); since it is scarcely to be expected that water so feebly acidulated could effect any considerable transformation at the ordinary temperature.

This solvent action is not confined to muriatic acid, but is possessed by several other acids, even by those which, in larger proportion, precipitate albumen from its solutions, by forming with it insoluble compounds.

The gluten of wheat, when acted upon by a similar acidulated fluid, forms a limpid solution, which resembles, in all its chemical reactions, that of the albuminose of fibrin; but it contains no principle analogous to epidermose. The serum of the blood, the albumen of the egg, and the caseum of milk, when treated in the same manner, afford analogous results.

The following conclusions are drawn by M. Bouchardat from these important experiments:

“1st. Fibrin, when separated from fatty matter, is composed of three proximate principles in variable proportions; a substance identical with pure noncoagulated albumen, for which I propose the name of *albuminose*: this fluid albumen is imprisoned in a network of a tissue composed of *gelatine*, and of a principle possessing all the properties of the epidermic formation, for which, on this account, I propose the name of *epidermose*.

“2d. The fundamental principle which we find in the albumen of the egg, in the serum of the blood, in the gluten of the cerealia, and in the caseum of milk, is always identical; it is albuminose mixed or combined, sometimes with earthy matter, as phosphate of lime and magnesia; sometimes with alkaline salts; sometimes with fatty matters; which extraneous substances mask its essential properties. When, by the operation of an almost unappreciable proportion of acid, we have destroyed this transient combination, the solution of albuminose possesses identical properties, exerting precisely the same chemical reactions, having the same influence on polarized light, and possessing an energy (other things being equal,) exactly proportionate to the quantity of the substance dissolved.”

This last statement may, we believe, be accepted as truth; since it bears a very close correspondence with the results of the analogous experiments of Mulden and other German analytical chemists. And with respect to the former, we do not see any ground for hesitating to accept the conclusion of M. Bouchardat, that gelatine exists in small quantity in the blood; and that its amount is much increased in certain pathological conditions. That gelatine exists in the blood has always been considered probable; especially since our increased knowledge of the chemical relations subsisting between gelatine, fibrin, albumen, &c., has made it almost certain that the gelatine derived from the food cannot be converted into an albuminous or fibrinous tissue, but can only be employed for the nutrition of the gelatinous tissues. (See vol. XIV. p. 510.) That a substance resembling the horny matter of the epidermic tissues, also, should exist in the blood, appears quite consistent with our previous views; since the elaboration of this matter, like that of fat, may be regarded as holding a middle place between the functions of nutrition and secretion, and as probably taking place in the blood during its circulation. By a reference to the comparative table of the constitution of the different proxi-

mate principles, which we extracted in our last volume (p. 513,) from Liebig's work, it will be seen that the epidermic substance does not depart so widely as gelatine from the composition of fibrin, albumen, &c.; so that its elaboration from them may be a very simple process.

We can by no means assent, however, to the view of the nature of fibrin which M. Bouchardat seems desirous of founding upon these experiments,—namely, that in the clot of blood there is a network composed of gelatine and epidermose, imprisoning fluid albuminose. It is to be remembered that most of his experiments on this subject were made on the buffy coat; and these cannot be regarded as affording sufficient ground for such a conclusion in regard to the ordinary crassamentum. We have always held that fibrin differs from albumen more in its *vital* properties than in its purely chemical relations; and we see no reason to alter our opinion. Fibrin we believe to be albumen in process of organization; that process is continually taking place in the living body; and the constant withdrawal of the fibrin for the nutrition of the tissues is compensated by a conversion of fresh albumen into fibrin. The process is seen distinctly in the gradual organization of coagulable lymph; and the ordinary coagulation of the blood appears to us a step in the same process, which does not go further because the blood is not in contact with a living surface. A precisely analogous series of gradations is noticeable in plants, where *gum* answers to the *albumen* of animals; whilst the *fibrin* is represented by the peculiar glutinous substance contained in the elaborated sap, which is evidently the pabulum from which the old tissues are nourished, and the new ones formed. To deny the distinct existence of fibrin, as such, (which M. Bouchardat seems inclined to do,) is just as unphilosophical as it would be to deny the existence of muscular fibre as a distinct substance, because, in its purely chemical relations, it may correspond with the albumen of the egg or the gluten of wheat. Moreover, there is a total absence of proof that anything like the gelatinous or epidermoid tissue described by M. Bouchardat really exists in the blood; on the contrary, we believe it to be yet undetermined whether gelatine is ever organized at all, or whether both it and the epidermic substance are not deposited in cells composed of fibrinous tissue, as fatty matter is well known to be. Further, it is well known (especially through the inquiries of Mr. Gulliver) that the fibrinous clot is hardened by long boiling, and that the fibrous appearance it presents becomes more distinct; precisely the reverse would be the case, if the areolar tissue were composed, even in part, of gelatine. In what relative condition the three principles,—namely, the true fibrin, the gelatine, and the epidermose,—exist in the crassamentum, remains a subject for future inquiry, in which microscopical and chemical investigations must go hand in hand. The great increase of gelatine in the blood, during inflammation of the gelatinous tissues, and the corresponding increase of the colourless corpuscles, naturally suggests the idea that the two phenomena may be in some degree related.—*Comptes Rendues*, 1842.

New Ganglia of Nerves discovered. By Dr. REMAK.—In a short memoir, in *Casper's Wochenschrift* for 9th March, 1839, Dr. Remak mentions that he has discovered in the human subject small ganglia on the filaments of the cardiac nerves as they are ramified on the surface of the heart. These ganglia are very small, but

when examined under the microscope the characteristic gray corpuscles placed among the filaments of the nerves leave no doubt as to their nature.

In the *Medicinische Zeitung*, of the 8th January, 1840, Dr. Remak announced that he discovered small ganglia upon the branches of the sympathetic as they enter the lungs.

“The par vagum branches of the bronchial nerves (he says) run, as Reisseisen has already pointed out, along the subdivisions of the bronchial tubes nearly to the surface of the lungs. According to my researches they remain white, contain a disproportionate number of white primitive fibres, and present no ganglionic swellings. On the other hand, those from the bronchial plexus which enter the posterior part of the lungs are gray, and contain a great number of gray or organic fibres. They give off smooth non-ganglionic gray branches which run below the pleura, and are probably distributed in it. The principal portion, however, run upon the bronchi, soon lose themselves in the walls of these tubes, and present on their finer ramifications, as in the cardiac nerves, small ganglia, some of which may be recognized by the naked eye, others only by the microscope. In these ganglia I have also, as in those upon the cardiac nerves, ascertained that there is an increase in the organic fibres.” Dr. Remak also states that he has discovered ganglia upon the smaller branches of the *superior laryngeal nerve* in man, in swine, the ox, the sheep, and the horse. A pretty large ganglion is placed on both sides, is very constant and generally symmetrical, on the branch of the superior laryngeal nerve which is distributed upon the epiglottis. He also found ganglia upon the branches of the *glosso-pharyngeal nerve*. All these ganglia are placed upon the filaments of the sympathetic which join themselves to those cerebro-spinal nerves. He has not been able to detect these ganglia upon the gray branches of the nerves, of the kidney, the spleen, and the liver.

In another short paper, in the *Medicinische Zeitung* for 15th April, 1840, Dr. Remak gives the result of his researches upon the nerves of the uterus and the bladder. He states that from the difficulty of procuring the impregnated uterus in the human species, his observations were made upon the human unimpregnated uterus, and upon the impregnated uterus in the lower animals. The nerves of the unimpregnated uterus in the domestic animals are in relation to the size of that organ of very great fineness, even more so than those of the liver. These uterine nerves are whitish from the preponderating number of primitive tubes (*primitivröhren*) entering into their formation, and in general are without ganglia. In swine, however, small ganglia are regularly found on the trunks of the uterine nerves on both sides of the organ in the unimpregnated condition, but the further divisions of these nerves present none. During the progress of utero-gestation, as Tiedemann has already observed in the human species, the size of the uterine nerves is remarkable, and they may then, as for example in swine, be readily followed into the cornua, and in sheep to the bottom of the uterus.

“I have suggested on these grounds, and this suggestion is elsewhere mentioned, that the increased size of these nerves during utero-gestation was dependent upon an increase in the growth of the organic nervous fibres. This opinion has now been fully established, for the nerves of the impregnated uterus are gray, and composed of a relatively greater number of organic fibres, which during utero-gestation evidently increase the mass, while the number of primitive fibres which

come from the spinal cord continue unchanged. Peripheral small ganglia which the analogy of the heart leads me to expect, I have not hitherto found on these gray fibres."

Dr. Remak also mentions that, on the filaments of the sympathetic distributed on the walls of the bladder he has found small ganglia. He believes that to this class of ganglia ought to be referred the small ganglia described by Müller to exist on the nerves of the penis on their entrance into that organ.

On the Erectility of the Iris. By Professor GROMELLI, of Modena.—Fontana's argument against the erectility of the iris, viz., that the finest and most penetrating injections, thrown into the arteries, even immediately after the death of an animal, never produce any extension of the iris, like what happens to the corpora cavernosa, we find controverted in a recent Italian journal. The substances which Professor Gromelli has found to succeed best for minute injections of the iris, are olive or walnut oil, coloured in various ways. He states that these injections penetrate into the most delicate ramifications, without becoming extravasated, and preserve for a long time the parts impregnated with them. In injecting the dead bodies of infants, Professor G. observed that the iris, previously relaxed, swelled up, and that the pupil, previously much dilated, contracted to the extent of more than half its diameter, just as it is seen to do when the retina is struck by the light during life. This fact seems to prove, that the iris is composed of blood-vessels. By the aid of the microscope they are seen disposed, between the ciliary and pupillary edges of the membrane, in rays, partly rectilineal, partly serpentine, while a few run in a circular direction. It results from such a disposition of radiating vessels, fixed at the great circumference of the iris and free towards the pupil, that the sanguineous turgescence expands this membrane and contracts the pupil, while the return of the blood allows the membrane to shrink and the pupil to expand.—The professor concludes, that the iris is composed of a vascular turgescible, or erectile, tissue.—*Memoriali della Medicina Contemporanea.*

Virey's Objections to LIEBIG's Theory of the Uses of Respiration and of Food.—Liebig maintains that the chief use of the food is to supply carbon and hydrogen, which, uniting with the oxygen absorbed from the air, give rise to the generation of animal heat. He consequently holds that there is a certain fixed relation between the amount of food consumed, and the quantity of carbon and hydrogen thrown off at the lungs. M. Virey opposes this theory, as contrary to common observation, as, even though it be allowed to be applicable to mammalia, birds, and reptiles, it is by no means to those animals which respire by means of branchiæ. Thus all animals with branchiæ consume but little oxygen, comparatively speaking, and yet many of them devour very great quantities of food. Even the largest and most voracious of the reptiles, as the alligators, crocodiles, &c., which devour enormous quantities of food, under a burning climate too, respire feebly with their vesicular lungs, and consume but little oxygen.

Fishes, whose blood is but imperfectly oxygenated by the branchial apparatus, are perhaps among the most voracious of animals, and yet, according to Liebig's theory, they ought to eat little, because they consume little oxygen.

The same holds true of the Mollusca. The cuttle-fish, *buccinum*, *strombus*, *muræx*, &c. grow to a large size; but their respiration is very imperfect, and yet they are great flesh-eaters. The Crustacea, again, as the crabs, lobsters, &c., grow rapidly, because they are great eaters; but their branchial apparatus is not fitted to consume much oxygen.

In all these animals assimilation takes place very rapidly, notwithstanding their feeble respiratory powers; and they are, besides, by no means deficient in activity or muscular powers, though their flesh be but feebly azotized or animalized, and their blood is always cold.

If it be one of the characters of vitality, that the more perfect this principle is, the greater is the number of germs, or eggs, or fœtuses produced, then, quite contrary to Liebig's theory, the number of germs produced is in the inverse ratio of the perfection of the respiratory functions. Fishes and mollusca deposit their spawn or eggs by millions; but the mammalia, and even the birds, whose respiratory functions are the most perfect, are in this respect infinitely behind these. On the other hand, it is seen that the number of germs or eggs is rather proportioned to the nutrition received; for the amount of food taken is not proportioned to the respiration in the animal kingdom.

M. Virey therefore concludes, that the vital force or central nervous energy has more to do with the production of animal heat than the consumption of carbon at the lungs, and this for three special reasons;—1st, Because a fecundated egg resists a freezing temperature longer than one which has not been fecundated. 2d, That a hybernating insect, reptile, or animal, or even trees during winter, by the sole influence of a vital power, resist a freezing temperature, whereas the same animals, if dead, would be instantly frozen. 3d, That many mammalia and birds keep themselves warm even in the most rigorous winters under the Pole, not in consequence of a greater amount of oxygen consumed, nor by a greater amount of muscular activity, but in consequence of a more abundant highly azotized or animalized nourishment.—*American Journal of the Medical Sciences*, Jan. 1843.

MATERIA MEDICA AND TOXICOLOGY.

A new Method of administering Quinine. By Dr. GUASTAMACCHIA.—The author's object was to find some method of avoiding the disgust which the bitterness of quinine always excites; and after repeated trials, he says he found it best to dissolve eight grains of the sulphate in half an ounce of rectified spirit and rub it, in two doses with an interval of a quarter of an hour between them, along the spine. In intermittent fever this should be done at the beginning of the cold fit; and it very often prevented even a single recurrence of it.—*Il Filiatre Sebezio*. Agosto, 1841.

Phloridine.—This is a new medicine, which is now very highly spoken of by French practitioners as a useful adjunct to our cinchona preparations. It has been

used for some years in Germany, Poland, and France. It is extracted from the bark of the roots of the apple-tree and the wild cherry-tree, and is thus prepared : the bark of recent roots is boiled with water sufficient to cover them, for half an hour. This is poured off, and the same quantity is again used ; these two fluids are mixed together, and at the end of six hours deposit the phloridine in the form of a deep-red velvety-looking matter.

M. Lebaudy, the editor of the *Journal des Connaissances Médico-Chirurgicales*, says, "its efficacy is so decided, that we cannot hesitate to class it with the most powerful febrifuges ; and it has this advantage over quinine, that it never induces gastralgia."—*Braithwaite's Retrospect*, No. 5.

PATHOLOGY AND PRACTICE OF MEDICINE.

On the employment of large doses of Sulphate of Quinine in the treatment of Typhoid Fever. By M. SAINT LAURENT.—Trials of the virtues of this remedy have been made at the Hôpital Cochin by M. Blache, who was led to form a conclusion favorable to its employment in cases of typhoid fever. The cases, however, in which it was used were not numerous, and in some of them other remedies were given either before or in connexion with the quinine. M. Broqua of Plaisance, who first introduced this practice, coming to Paris, induced M. Husson to permit some of his patients at the Hôpital Cochin, to be subjected to this mode of treatment, and the results thus obtained are published by M. Laurent.

The dose of the medicine was usually ten centigrammes every hour ; sometimes the dose was larger and administered less frequently ; and in several instances the patients took more than 3ij in every twenty-four hours for many days together. In thirteen cases no other remedy than the quinine was administered, but though the patients recovered, yet the results do not show any great superiority in this over other methods of treatment. In no instance were the symptoms cut short at once by the quinine, while in several cases the increased headache and thirst, and the greater dryness of the tongue which followed its use were not only of importance in themselves, but rendered the cases more complicated, since it was not easy to tell how far those symptoms were produced by the medicine, or how far they betokened an aggravation of the disease. Of ten patients who had the disease mildly, all recovered but one, whose death M. Laurent attributes, apparently with justice, to the action of the quinine. Of three patients who were attacked by the disease in a severe form, one only recovered, and even he was for some time in a state of great danger owing to hemorrhage from the intestines.

The cases are detailed in full, and are not by any means such as would impress one with a favorable opinion of the treatment proposed by M. Broqua. M. Laurent adds that M. Broqua is accustomed to administer the quinine in cases so slight that the patients would recover even though no treatment at all were adopted, and that if M. Husson had consented to its employment in such cases, the number of reputed cures from the sulphate of quinine would have been far greater.—*Archives Générales*, Sept. 1842.

The relative Frequency of Tubercles in various Organs. By Dr. ENGEL, of Vienna.—The proportional frequency of the occurrence of tubercle in the lungs to that of tubercle in the cerebral membranes, the pleura, liver, and spleen, is as 18 to 1; to that of tubercle in the brain and kidney as 18 to 2; and that of tubercle in the peritoneum and intestines as 18 to 3. This is the more remarkable, when compared with the relative frequency of cancer in the same organs. Cancer of the lungs occurs, in proportion to cancer of the liver, as 18 to 48; to cancer of the stomach as 18 to 42; to cancer of the intestines and kidneys as 18 to 12; and to cancer of the brain, spleen, peritoneum and uterus, as 18 to 18. The frequency of tubercle of the lungs is to that of all other diseases of those organs as 2 to 3.—*Canstatt's Jahresbericht*, 1842.

Treatment on Tinea Capitis.—In an interesting paper by Dr. Graves, in the *Dublin Journal of Medical Sciences*, Nov., 1840, on “the treatment of various diseases,” he makes the following practical observations on tinea capitis:

This species of ring-worm or dry tetter, is very contagious, and sometimes makes its appearance in one or several spots on the scalp, face, or other parts of the skin, but seldom is observed on the lower extremities or abdomen. It scarcely ever remains for any great length of time fixed in any part, except the hairy scalp, where it is apt to locate itself and become permanent; its duration often extending through a great number of years, or even a whole lifetime. I recommend attention to the following points:—

1st. When the disease is of long standing, always insert an issue in the arm before you attempt its cure. I have seen water on the brain, and other fatal consequences, from neglect of this precaution.

2ndly. If this disease has clearly originated from contagion, and no other evidence of derangement of the general health can be detected, we must not, from the mere presence of the cutaneous affection, infer a constitutional taint, and must avoid the common error, of making the poor children undergo a course of alterative medicines.

3dly. This affection originating in contagious matter directly applied to the skin, cannot, like some varieties of lepra and psoriasis, (to which it often bears a great resemblance,) be cured by internal medicines, such as mercury, arsenic, and iodine, given separately or in combination, as in Mr. Donovan's new preparation.

4thly. When it occupies the hairy scalp, the common procedure of shaving the head is injudicious, for it adds to the irritation of the skin; and the scalp can be sufficiently exposed by cutting the hair as close as possible with a sharp scissors.

5thly. The great object is to get rid of the morbid action which is going on, and which consists in an inflammation of the external surface of the corium; an inflammation occurring in spots, and giving rise in the first place to an increased secretion of epidermis, which produces the scaly appearance of the parts affected; and in the second place, to a very slight and scarcely perceptible oozing of moisture which immediately dries into scales, and thus escapes notice, being mingled with the scurf formed by the detached portions of morbid epidermis.

6thly. The cure must be accomplished by removing these scales as far as that can be done by diligent ablution, without using any irritating degree of friction: and when the diseased portion of the skin has been thus exposed, we must next

have recourse to some application which will destroy the morbid secreting surface. Formerly this was attempted by means of an endless variety of complicated formulæ, each of which had its advocates; the list may, however, be now reduced to a few simple remedies, and in truth, with nitrate of silver, sulphate of copper, or strong tincture of iodine, every case of this disease may be cured.

7thly. I never use the solid lunar caustic, or sulphate, but prefer a solution of ten, fifteen, or twenty grains to the ounce, as the case may require. As to the application of this solution, it will not do to apply it, as is generally done, with a camel's hair pencil, *for it must be strongly rubbed into each spot*, for which purpose a small bit of sponge, covered with fine linen, and tied to the end of a quill or slender stick, should be employed. When a large portion of the scalp is affected, it will require some perseverance to apply this lotion in an effectual manner.

8thly. An application of this nature, when effectually done, must not be repeated oftener than once a week.

9thly. Immediately after it the whole scalp must be covered with a spermaceti dressing, and the spermaceti must be renewed at least four times daily, so as to keep the head constantly moistened with it. The head is not to be washed for three days after the application of the caustic, or of the tincture of iodine, but then it may be well but very gently washed with yellow soap and water twice a day, taking care to cover, as before, with a spermaceti dressing after each washing.

In scaly diseases of the skin, it is quite surprising how much the cure is facilitated by keeping the affected parts constantly smeared with spermaceti, oil, melted suet, or even candle-grease. Without this aid, the use of caustics will often disappoint the practitioner.

10thly. When the above precautions have been taken, the cure will advance rapidly, and each succeeding application of the caustic solution, or of the tincture, may be less severe.

Colocynth Oil, a substitute for Croton Oil in Neuralgia, Sciatica, &c. By M. G. JANELLI.—Dr. Janelli mentions that he has found the oil of colocynth a valuable and cheap succedaneum for croton oil, as an external application in neuralgic affections, but especially in sciatica. He relates in detail three cases of its efficacy in sciatica, and three in cases of rheumatism. After frictions with the oil, the patients generally fell asleep, so much were their sufferings alleviated, and in a few days were so far recovered as to be enabled to return to their usual avocations.

It is to be regretted that no details are given as to the mode in which this oil is prepared, whether from the colocynth seeds by expression, or from some preparation of the pulp of the apple.—*Edinburgh Medical and Surgical Journal*, Oct., 1840, p. 517.

SURGERY.

The Guillotine for Excision of the Tonsils. By CÆSAR HAWKINS, Esq.—I have found an instrument, which I have been in the habit of using for some time past, so little known to surgeons, who are constantly performing this operation, and so many medical friends, to whom I have recommended it, have been delighted with the facility with which the tonsils can be removed by means of this instrument, that I am induced to draw your readers' attention to it, as a great improvement in surgery. I can do this with greater confidence, because I do not claim the merit of the invention, but only of two or three little alterations in its form, which facilitate its operation.

The instrument is a kind of guillotine, invented by Dr. Warren, of America, or at least recommended by him, which excises the tonsil with great ease and without the possibility of cutting any thing which is not purposely included in it by the operator. A hole of an oval shape is made at one end of a plate of metal, which is gently pushed over the tonsil, and a concealed blade runs in a groove of the plate, and is pushed forward so as to cut off exactly so much of the tonsil as the surgeon causes to project into the hole. The grooved plate has a handle, which can be held in either hand for the right or left tonsil, and the tongue is kept down by the instruments or by the finger of the other hand, and the moveable blade has a little concave knob receiving the thumb of the same hand which holds the handle, by which the blade is pushed forward across the hole, so as to separate the protruding tonsil as it passes; and the excised portion adheres to the blade after the division, so as easily to be pushed forward out of the mouth before it can drop into the fauces. The introduction causes very little irritation of the fauces, because its action is by pressure, instead of dragging on the tonsil, as the tenaculum does in the common manner of operating, and the bleeding very trifling, and the subsequent inflammatory soreness is much less than in the usual operation as the time is shorter in its performance. I have found two different sized instruments sufficient for very young children, or for adults; but they can, of course, be made of any size required.—*Medical Gazette*, Jan. 31, 1840, p. 706.

Seat of Blennorrhagia in Females.—A report of the Academy of Medicine having erroneously ascribed to Dr. Gilbert an opinion, that in the gonorrhœa of women, vaginal discharge commonly co-exists with the urethral. He has published the following extract from his Memoir to the Academy, to show his opinion to the contrary, and that the vaginal discharge or secretion from the vagina *itself* is more commonly *absent*; also that the discharge lining the vagina, will be found frequently to arise from the neck of the uterus. In females, says the author, the seat of election of *blennorrhagia* is the meatus urinarius, as in the man; but in all cases where I have used the speculum, I have seen a *uterine discharge* accompanying that of the urethra, and continuing after the latter is cured, so that *the neck of the uterus may be considered the principal source of the blennorrhagic flux in women*. Nevertheless, some modern writers have designated the female clap by the term vaginitis, or inflamed vagina; but in the *immense majority of cases, the vagina does not secrete the*

discharge, and if it be sometimes red, this appearance is transient, and yields rapidly to repose and cleanliness. It is only in a few rare cases that we meet with a milky or purulent discharge, really furnished by the vagina; on the contrary, in every woman who has contracted a clap, there exists, during the two or three weeks, a characteristic suppuration, together with a discharge, originating in the *neck* of the uterus, which last, by its continuance after the cessation of the urethral symptoms, may be confounded with leucorrhœa.—*Medical Times*, October 17, 1840, p. 34.

Chloride of Zinc in Necrosis.—The difficulty of penetrating the hardened case of new bone when long formed, is too well known to require any comment; and it not unfrequently happens that any attempt to reach the sequestrum is either rendered abortive thereby, or occasions such a degree of disturbance to the whole shaft, as to produce more harm than good. Mr. Guthrie, to whom I allude, has availed himself of the peculiar properties of a remedial agent recently introduced, the chloride of zinc, which, attacking the animal tissue of the bone, destroys it, and thus causes the earthy matter to soften and become detached. The sequestrum is by this means exposed, with little pain or disturbance of the part, and may be dealt with according to circumstances. To the success of this plan I can myself most willingly testify.—*Medico-Chirurgical Review*, July, 1840.

MIDWIFERY.

Treatment of Miscarriage. By J. S. STREETER, Esq.—Mr. Streeter doubts the propriety of employing opium in the earlier weeks or months of pregnancy—he seldom has recourse to it where abortion is threatened before the third month of pregnancy is completed.

“When, however, in addition to uterine pain these early cases are attended with any hæmorrhage, I lay it down as a canon of treatment that the practitioner ought not to employ opium, or any drug that has the property of suspending or lessening uterine contraction. The results of inquiries show that miscarriage, in almost all instances, arises from causes over which, when its *essential symptoms* have set in, the accoucheur has lost all control. Fœtal or uterine disease, or imperfection, has accomplished its work of destruction, and the blighted embryonic thing must now be cast out from the womb. If the ovum is not so blighted, rest in the recumbent or horizontal position, mental quietude, the abstaining from stimulating articles of food, the clearing out of the bowels by a simple enema or mild purgative, the administration of common salines, such as the citrate of potass, with small doses of digitalis and hyoscyamus, will suffice to allay the symptoms. When, however, the ovum is blighted, it must necessarily be thrown off by miscarriage, and the suspending the uterine pains by the administration of opium, only retards, and in too many instances, disarranges that process altogether. If, therefore, hæmorrhage continues or recurs after a few hours’ trial of the above means, it seems to me that

it then becomes a duty to ascertain, by vaginal examination, whether the os uteri has begun to dilate or not. If dilatation of this part has commenced, or if the hæmorrhage steadily increases, even before it becomes profuse, or tells upon the constitution, the ergot of rye should be freely and fearlessly employed in larger or smaller doses, and given at longer or shorter intervals, according to the effects which it produces. The accoucheur should, from time to time, as gently as possible, ascertain the extent of dilatation of the os uteri, remove all clots from the vagina, and dislodge the ovum if, as sometimes happens, it is merely adhering to the os uteri and keeping up hæmorrhage by the irritation which it occasions there."

Keeping the room of a moderate temperature—the horizontal posture—cold drinks—light food—stimuli if syncope impends—and, should the symptoms become alarming, pressure on the abdominal aorta and plugging of the vagina.—Permanent contraction of the uterus can often be brought on and may nearly always be sustained by regularly-repeated doses of ergot of rye, and the use of cold and astringent injections into the rectum. When all other means fail, the sole remaining resource is transfusion.—*Medico-Chirurgical Review*, July, 1840, p. 182.

Belladonna in Dysmenorrhœa. By Dr. BURNE, Physician to the Westminster Hospital, &c —[Dr. Burne in his work on habitual constipation, recommends the extract of belladonna in this painful affection. He says:]

In the treatment of painful menstruation, I have found the belladonna most valuable. I have usually prescribed it in the dose of a *quarter of a grain of the extract*, made into a small pill, which may be taken twice a day, where patients suffer, but not very severely, for two or three days about the menstrual period.—In the more urgent cases I advise it to be repeated in one hour; then again after an interval of two; then of three hours; till two, three, or four doses have been taken, according to circumstances: and I have seldom been disappointed in the result. It may produce giddiness and dimness of sight, but they soon pass away.—Its unpleasant effects are less than opium, and its efficacy decided.

[Speaking of the effects of the ergot of rye in menorrhagia, the same author says:]

I have heard persons express doubts of its efficacy; but so many cases under my own care have been benefited or cured by it, that I cannot but regard it as a most valuable addition to the materia medica..... Cases in which an exhausting draining hæmorrhage has persisted for five or six weeks after abortion have yielded at once to the influence of the ergot.

It is very important that the ergot should not be at all in a state of decay.—*British and Foreign Medical Review*, July, 1840, p. 44.

CHEMISTRY AND MEDICAL JURISPRUDENCE.

An Antidote to Arsenic.—The efficiency of the hydrated oxide of iron as an antidote for the poisonous effects of arsenious acid, has been tested in the following case, reported in the "*Journ. de Chim. Med.*" for August of the last year:—M. Josse ordered an emollient mixture for a patient who was ill with tubercular phthi-

sis, in its suppurative stage, attended with diarrhœa; for which mixture a packet of bolusses, intended as poison for rats, was sent from the apothecary's in mistake. These bolusses being found too large to be swallowed whole, one was divided, and a half taken. But a person present, fearful of some mistake having been committed, took occasion immediately to inform M. Josse, who presently ascertained that the patient must have taken sixty centigrammes, or ten grains, of arsenious acid. After white of egg had been administered, some means were employed to provoke vomiting; but these proved ineffectual. M. Josse now gave three ounces of hydrated tritoxide of iron, in a convenient vehicle, and with the happiest possible result, none of the usual symptoms of poisoning supervening. Forty-eight hours afterwards the patient passed a black-looking stool, and obstinate constipation lasted during many subsequent days; but no other inconvenient symptoms ensued, and the constipation not only had no permanently ill effects in the case in question, but was advantageous in causing the cessation, for a person at least, of the diarrhœa. Let us remark here, that we should be on our guard against the ill effects due to some of the *bonbons*, or sugar-articles, with which many shops in London are stocked. Dr. Thierfelder, of Meissen, reports the case of a child, four years of age, who, after having eaten of some of those sweetmeats, representing French beans, was attacked by spasms, colic, vomitings of mucous and bilious matters, diarrhœa, and a great inflation of the abdomen. The child being, fortunately, of a strong constitution, recovered in a few days under the use of mucilaginous drinks, anodyne poultices, and a few other diluent and palliative remedies. But the effects might not have been so readily got rid of, had the constitution been less able to resist disease; the sweetmeats were found on analysis to owe their green colour to arsenite of copper.—*London Lancet*, January 28, 1843.

Poisoning by Verdigris.—A CASE of this kind is related by M. Degrange, of Bordeaux, presenting marked peculiarities. A workman, with apparently no particular cause for suicide, complained on the 8th of August last, of much suffering, though without particularising its seat; and in the evening of the same day he was affected with vomiting and loss of appetite. Towards eleven o'clock he was found in his own house lying insensible on the ground, and removed to an hospital.—Here he remained in a comatose state,—his face pale; respiration hurried; extremities covered with a cold sweat; deglutition difficult; abdomen not painful on pressure, and a total absence of either vomiting or purgings, till his death at four o'clock. The body after death presented externally little remarkable, except obvious and extensive congestion over all the head. It had been ascertained that he must have taken verdigris; and several masses of this substance, in a roughly-pounded form, were met with in the œsophagus, the mucous membrane of which presented inflammatory arborisations, with softening at intervals. In the stomach, where the poisonous substance was again met with, the mucous coat assumed a general green colour, and arborised engorgements of the small arteries were frequent in the great curvature, the mucous membrane of which was ulcerated in seven or eight places. Arterial arborisations, softening, ecchymoses, and a green tint similar to that in the stomach, extended through the intestinal canal in its whole length, and large collections of fæces filled the colon and rectum. Chemical analysis determined the presence of verdigris in these fæces (and it is said of

copper in the contents of the urinary bladder,) but none was discovered in the blood. The paucity of the vomitings and total absence of the purgings which usually supervene so violently after taking this poison, were the most remarkable features in the case detailed, and are supposed by M. Degrange to have been due to the great abundance of the poison swallowed. We know that the effects of turpentine, calomel, and several other medicines, when they are taken to a large extent, are widely different from those which follow their administration in small quantities; and it would appear probable in the above instance that instead of the violent efforts occurring that are usually made by the stomach to eject verdigris when taken in small quantity, the poison was suffered silently to erode the mucous membrane, and gradually to produce the apoplectic phenomena which destroyed life.—*Gaz. Med.*, Nov. 26, 1842.

Sulphuric Acid a preventive of Lead Colic.—Soon after the establishment of the British White-Lead Works, and for some succeeding years, the lead colic prevailed amongst the workmen to a very distressing extent. The usual precautions were adopted of providing the workmen with gloves, and of enforcing strict attention to cleanliness on their part, ample means for this purpose being at the same time supplied, the men also being caused to change their working dresses on leaving their employment. Effective means, moreover, were adopted for carrying off the dust which arises in some of the operations, thus preventing as much as possible the inhalation of particles of white lead suspended in the air. The work-people had also a regular medical attendant provided by the proprietors of the works.

Notwithstanding the precautions thus adopted, the observance of which was carefully enforced, some of the work-people were constantly suffering from illness, and in the hot season the number of cases of colic much increased.

The copious use of treacle-beer has been considered at many white-lead works to be serviceable, to some extent, as a preventive of this malady, and the beverage was supplied *ad libitum* in our establishment.

I met with a statement some time since, that "sulphuric lemonade" had been successfully used at a white-lead manufactory in France as a preventive of the injurious effects of white lead, and it occurred to me that by adding *sulphuric acid* to the treacle-beer then used by our people, its supposed efficacy might be tested.—This idea was carried into effect in the summer of 1841, and the results have proved most gratifying, as, although during several weeks after the addition of the sulphuric acid to the treacle beverage, little advantage seemed to be derived, yet the cases of lead colic became gradually less frequent, and since October of that year, or during a period of fifteen months, not a single case of lead colic has occurred amongst the people.

As no other change has taken place in the circumstances under which these men are placed, nor in the influences to which they are exposed, I can only attribute this gratifying result to the employment of the sulphuric acid, which I conceive, produces its effect by converting the highly poisonous carbonate of lead into the innocuous sulphate of lead. I am therefore anxious that the work-people employed at other manufactories should be protected by the means which have been found so perfectly effective in this establishment.

It will be seen by the annexed formula that bicarbonate of soda is also added to

the treacle-beer, and that, consequently, sulphate of soda is produced, but the proportions of soda and sulphuric acid are such that rather less than one half of the sulphuric acid becomes neutralised. The object in adding bicarbonate of soda is to give a pleasant briskness to the beverage.

Formula for preparing the Sulphuric Beer.

Take of *treacle*, 15 lbs.; *bruised ginger*. $\frac{1}{2}$ lb.; *water*, 12 gallons; *yeast*. 1 quart; *bicarbonate of soda*, $1\frac{1}{2}$ ounce; *sulphuric acid*, (oil of vitriol,) $1\frac{1}{2}$ ounce, by weight.

Boil the ginger in two gallons of water; add the treacle and the remainder of the water, hot. When nearly cold transfer it to a cask, and add the yeast to cause fermentation. When this has nearly ceased add the sulphuric acid, previously diluted with eight times its quantity of water, and then add the bicarbonate of soda, dissolved in one quart of water. Close up the cask, and in three or four days the beer will be fit for use. As acetous fermentation speedily takes place, particularly in hot weather, new supplies should be prepared as required.

Miscellaneous Articles.

Effects of a Solar Eclipse on Animals.—In his report on the eclipse of July 8th, M. Arago mentions in support of a popular notion which he had always disbelieved, that a friend of his put five healthy and lively linnets in a cage together, and fed them immediately before the eclipse commenced. At the end of it, three of them were found dead. Other indications of the alarm it produced were seen in a dog which had been long kept fasting, and which was eating hungrily when the eclipse began, but left his food as soon as the darkness set in. A colony of ants which had been working actively, suddenly ceased from their labors at the same moment.—*Gazette Médicale*.

[The latter circumstance is analogous to the fact, which we have witnessed more than once, of domestic fowls going to roost during the darkness of an eclipse.—Such effects upon the lower animals are less remarkable than the influence of lunar eclipses upon the great Lord Bacon, which we learn from the unexceptionable testimony of his biographer Rawley. “One singularity,” says that writer, “there was in his Lordship’s temperament, not easily to be accounted for; in every eclipse of the moon, whether he observed it or not, he was certainly seized with a sudden fit of fainting; which left him without any remaining weakness, as soon as the eclipse ended.”]

Examination of Assistant Surgeons for the Navy.—A Board of Naval Surgeons assembled at the Naval Hospital (Asylum) Philadelphia, composed of THOMAS DILLARD, (President,) W. S. W. RUSCHENBERGER, SAMUEL BARRINGTON, WM. MAXWELL WOOD and DANIEL EGBERT, (Members,) for the examination of Assistant Surgeons for promotion, adjourned on Friday, the 3d of March.

The following is a list of the successful candidates, with the date of their respective commissions, and the subjects of their thesis before the Board, arranged in the order of merit.

	<i>Date of Com.</i>	<i>Subject of Thesis.</i>
James C. Palmer,	March 26, 1834,	Diseases of the Liver.
John L. Fox,	Feb. 9, 1837,	{ Medical Topography, and diseases of the Fejee Islands.
Charles F. Guillou,	Do.	Gonorrhœa.
John T. Mason,	Sept. 6, 1837,	{ Bloodletting, its uses and abuses in the practice of medicine.
Charles D. Maxwell,	Do.	Rheumatism.
Edward J. Rutter,	Do.	{ Effects upon the functions of the brain produced by external injuries.
John J. Abernethy,	Do.	Fractures of the Femur.
James Malcolm Smith,	Do.	Dislocations of the Femur.
Charles Wm. Tait,	Do.	{ The best means of preserving the health of Seamen.

It will be observed that all the above named candidates have been six years, and one of them nearly nine years in the Navy.

The subject of the thesis is assigned by the Board; and it is immediately written by the candidate in an adjoining apartment. A single sheet of foolscap paper is given to each, so that the opportunity of copying is cut off; nothing but previous knowledge, and a well trained habit of thought, will enable the candidate to produce a reasonably respectable treatise, written under these difficulties and disadvantages.—*Medical Examiner*, March 18, 1843.

Impregnation after Castration.—In Dunglison's *Medical Intelligencer*, vol. 1, pp. 146 and 244, there are two papers, one by the Editor, the other by Dr. Warrington, respecting the existence of the power of fecundation after castration. Several cases are related in proof that the operation does not immediately destroy this power in boars and horses; and Dr. Dunglison cites, as very decided upon this subject, the testimony of Varro, "given between eighteen and nineteen hundred years ago, *from personal observation*." "Vaccæ euim mensibus decem sunt prægnantes. De quibus admirandum scriptum inveni; exemptis testiculis, si *statim* admiseris, concipere." *De Re Rustica*, ii., 5. The writer to whom Varro refers,—for he does not appear to have made any personal observation,—was probably Aristotle. That great naturalist states on several occasions, in his *History of Animals*, that bulls are capable of generating immediately after being castrated. "Evenit aliquando ut taurus castratus, *illico* admissus, et inierit, et impleverit." *Lib.* 3, c. 20. "Tauri adulti si castrentur atque *illico* admittantur, manifesto generant."—*Lib.* 9, c. 537. Julius Cæsar Scaliger, in commenting on these passages, proposes an explanation of the fact which they state, and goes on to express with characteristic arrogance his entire disbelief of their truth. "Semen ibi præsto est neque fluxit; sed, per dolorem retractis vasis, retentum est, Puto tamen Ego aliud quidvis tum in animo habere, quam ut coeat. Historiæ fidem ambiguum alibi diximus. Quippe doloris acerbitas aliorum tauri impetum quam ad venerem stimularit. Universam opinionem delevimus."

Transplantation of the Cornea.—Herr Feldmann, in a memoir lately addressed to the Academy of Sciences, states, as the result of experiments lately performed

by him, M. Davis of Munich, that the Cornea, first detached from the eye of an animal, and afterwards replaced and kept in its situation by sutures, forms fresh union and cicatrizes firmly; and a similar result obtains if the cornea replaced or grafted, as it were, be that from another animal,—even one of a different species. The success of the operation is said to be better insured when the crystalline lens has been accidentally or purposely removed. The value of this curious experiment would be but small were its success limited to fixing firmly in front of a lacerated eye a structure which must ever afterwards remain opaque; but it is asserted that the operators have been enabled also to procure a partial transparency in the transplanted cornea.—*Gaz. des Hop.*

Professor Richard S. Steuart.—It affords us great pleasure to announce the recent appointment of Dr. Richard S. Steuart, of Baltimore, to the Professorship of the Theory and Practice of Physic in the University of Maryland. The well-known abilities of this gentleman, and his extensive experience as a practitioner of physic, afford the most satisfactory auguries of his eminent success as a teacher of medical science. His distinguished reputation for moral excellence will render his election peculiarly gratifying to his professional brethren, and to his wide circle of acquaintance throughout the community. We feel assured that the Medical Faculty could not have made a more judicious or more popular selection, or have chosen an associate more zealous or more able to promote the true and permanent prosperity of the University.

Necrology.

Mors autem vellens, vivite, ait, venio.

VIRGIL. *Copa.*

Died in the Island of Madeira, whither he had gone for the benefit of his health, Dr. Charles R. Sewall, son of the Hon. Charles S. Sewall, of Harford County, Md.

At H. Habberset's hotel, Baltimore, on the evening of the 6th March, 1843, after an illness of several weeks, of an affection of the lungs, Dr. Amasa Kellogg, aged 43 years—a native of Charlestown, New Hampshire. The deceased was much esteemed and respected by all who knew him.

The Charleston papers announce the death of Dr. Edward W. North, who was for a long time Mayor of that city. He died suddenly of a rupture of a blood vessel after retiring to bed.

Departed this life, in Baltimore, on the morning of the 2d of January, 1843, after a sudden and very brief illness, Professor Nathaniel Potter, M.D., in the 74th year of his age.

Dr. Potter was a native of Caroline County on the Eastern Shore of Maryland. The greater part of his long and useful life was passed in Baltimore, where he

early achieved the eminent position in the medical profession which he retained to the last, and to which he was justly entitled by his natural abilities and by his literary and scientific acquirements. Soon after settling in this city, he exerted himself, in association with the late Dr. Davidge and others, as one of the most active agents in establishing the Medical Department of the University of Maryland. In this institution, he filled with distinguished honor for more than thirty years, and up to the time of his death, the chair of the Theory and Practice of Physic. In private and domestic life, Dr. Potter manifested many amiable virtues which will be remembered with affectionate fondness by his family and friends.—As a practitioner of medicine, he was remarkable for promptitude and integrity of judgment, and for the boldness and energy of his remedial measures. As a teacher, he was perspicuous and impressive, displaying in his lectures extensive knowledge and great practical good sense, rendering his subject pleasing and attractive by his native power of wit, and illustrating and enforcing his doctrines by the ample resources of a profound and elegant erudition.

We subjoin the proceedings of the Medical Faculty of Baltimore at a meeting called on the occasion of Dr. Potter's death.

"At a meeting of the Medical Faculty of Baltimore, held on the 6th of January, 1843, Dr. Briscoe was called to the Chair, and Dr. Durkee appointed Secretary.

"The Chairman having stated that the object of the meeting was to adopt measures expressive of the respect of this Faculty for the memory of the late Professor Potter, Dr. Dunbar moved the appointment of a committee of seven, by the Chair, to carry out the object of the meeting.

"Accordingly, Drs. Wright, Dunbar, Smith, Fonerden, Annan, Roberts and Durkee were appointed, and reported the following preamble and resolutions, which were unanimously adopted.

"Whereas, it has pleased Divine Providence to remove from among us Professor N. Potter, one of the most distinguished of our associates, and who long occupied as a teacher and practitioner of medicine, an eminent position; and whereas, the members of the Medical Faculty of the city of Baltimore, have assembled to offer a just tribute to the memory of their deceased brother, expressive of their own feelings, they cannot permit the occasion to pass, without recording their testimony of respect, the last kind office now remaining to those who esteemed him during life.

"*Resolved*, 1st, That they deeply lament the sudden decease of their distinguished associate, Professor Potter, and cordially sympathise with his family in their sudden and melancholy bereavement.

"*Resolved*, 2d, That a memoir of the deceased be prepared for publication in the Maryland Medical and Surgical Journal, of which he was formerly a co-editor, and that his colleagues of the University of Maryland be invited to perform that duty.

"*Resolved*, 3d, That the members of this Faculty be recommended to wear, as a token of respect to the deceased, the usual badge of mourning for 30 days.

"*Resolved*, 4th, That these resolutions be published in the daily papers of this city, and in the Maryland Medical and Surgical Journal, and that a copy signed by the Chairman and Secretary of this meeting, be transmitted to the bereaved family of the deceased.

JOHN H. BRISCOE, Chairm'an."

ROBERT A. DURKEE, Sec'y."

THE MARYLAND MEDICAL AND SURGICAL JOURNAL.

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Original Communications.

ART. I.—*Notes on the Yellow Fever.* By S. C. LAURASON,
M.D., U. S. Navy.

IN September 1842, while lying in the Bay of Pensacola, the yellow fever suddenly made its appearance on board the sloop of war *Levant*, of which I was the Surgeon. The invasion of the disease was equally sudden and unexpected. On one day we were comparatively well, and in the evening had several cases of fever, which continued to develop itself among the crew and officers, until, in the progress of the epidemic, out of a complement of about 160 souls, not more than 15 escaped an attack in some form or other. The number of deaths amounted to 10.—To be convenient to the hospital we proceeded to the Navy Yard. It being the opinion of the medical officers of the station, gentlemen of some experience in the disease, that the cause was, in a great measure a local one, it was thought advisable to abandon the ship and remove the crew on shore. A large, open and commodious timber-shed was accordingly converted into very suitable

quarters. This step however afforded no check to the progress of the infection. Every night was marked by the occurrence of new cases, which were, as soon as practicable conveyed to the hospital. For a few days, the fever seemed to be confined exclusively to our ship's company; but soon, however, some fatal cases occurred in the town of Pensacola, and on board the French vessels lying in the bay. This was evidence of the fact, that the rapid developement of the disease among our crew, was not altogether local, although, from the peculiar habits of men-of-wars-men, they were more susceptible to the influence of the exciting cause, which, no doubt, existed in the atmosphere, and the character of which is altogether conjectural. There is a prevalent belief in the inhabitants of Pensacola, that, whenever, by reason of abundant rains in the summer, the ponds in the vicinity are kept full, yellow fever never makes its appearance in the ensuing fall. However true this may have been in other seasons, it was not so in this, as there had been considerable rain, and the ponds were well filled, and the people confident of a healthy year. Another prevalent belief is, that whenever the winds in the early fall, blow steadily for some days from the north, fever is the inevitable consequence. This is no doubt true, and accounts very well for the occasional miasmatic diseases which prevail, and which are caused by the north wind sweeping over a considerable extent of paludal surface, and we accordingly found that, during the existence of the epidemic, these northerly winds were always attended by an increase in the number and violence of the cases. But this cannot account for the epidemic itself, for at other times, the prevalence of this wind gave rise to miasmatic fevers of a different kind. The exciting causes of the epidemic yellow fever are only conjecturally known, some believing them to be general and atmospheric, others to have a local origin. From my observation of the origin, progress, and termination of this epidemic, I was led to believe, that the poison of yellow fever, (if indeed there was any specific poison, and of its existence, I conceive the distinctive character of the fever to be a strong argument,) existed in the atmosphere, and that subjection to any debilitating causes, such as exposure to the heat of the sun, the chilly temperature of

the night air, the committing of any excess, any source of grief or mental anxiety, lowered the resisting tone of the system, and thus predisposed it to yield to the effects of the poison. So certain a predisposing cause is exposure to the sun, that one would be almost disposed to locate the specific poison in the rays of that luminary itself. The carpenter of the *Levant* informed me, when first taken, that, in doing a job of work in the open sun, he felt the fever working within him.

In speaking of this disease, my remarks are confined exclusively to what I saw as Surgeon of the *Levant*, during the rage of the epidemic among the crew and officers. With the exception of a few cases, which came under my personal attention throughout the attack, all were treated at the Navy Hospital. Of course these observations will be somewhat desultory, and consist of what struck me as peculiar to the disease.

I had never before seen a case of this fever, and was disposed to regard it as a higher grade of malarious disease, differing only in form and intensity from the general character of bilious continued and remittent fevers; and I was accordingly deeply impressed with the well defined destructive character of the yellow fever.

The excessive pain in the small of the back, and the aching distress in the lower limbs were strong pathognomic symptoms. The mildness or violence of these symptoms generally corresponded with the nature of the attack. The onus of the disease appeared to me to be seated in the stomach. The worst cases might in some truth, be said to be violent gastro-enterites terminating in the fatal and peculiar disorganization of yellow fever. The tongue, the index of the state of the stomach, presented an almost unerring prognostic of the form of the attack. If there was no irritability of stomach, or little or no redness of tongue in the onset of the fever, although the other feverish symptoms were considerable, the prognosis was favourable. A blister over the epigastrium seemed to act as a powerful resistant to the peculiar disorganizing tendency. I am confident this state of things was arrested by a large blister to the stomach of an officer, which presented all the appearances of a rapid approach to that condition,

of which, the black vomit is the fatal symptom. Ice is a most useful agent—as soothing to the nervous excitation as grateful to the heated stomach.

The sudden developement of this affection was sometimes remarkable, the individual being at once seized with a chilly sensation; or nausea of stomach, while a moment previous he felt perfectly well. An officer was seized at the dinner table, while in the midst of the meal, with a sudden nausea, which was quickly followed with the general symptoms in the mildest form, requiring no treatment beyond the administration of a simple calomel purge, and an attention to regimen. In this case, it passed away like a simple paroxysm of a mild intermittent. Others were attacked in the afternoon, after having enjoyed perfectly their appetites for dinner; others again would retire to their beds perfectly well, and awake in the night with all the symptoms of the disease. In the commencement of this disease, one decided bleeding, with a full calomel purgative, would almost be sufficient to break it up, whereas, if neglected for 24 or 36 hours, it was apt to assume the worst form. This is one cause of the great mortality of this fever, most persons deferring the use of remedial means for a day or two.

I would take this occasion to remark, that, some years ago, I had an opportunity of seeing much of the marsh remittent fever, which has proved so destructive to our army in Florida. It affected the crew of a steam-boat, of which I was the medical officer; and it was a much more serious and protracted form of fever, in the long run, than the present epidemic—and as distinct and dissimilar as small-pox from measles.

The prognosis of yellow fever is simple—depending on the mildness or severity of the pathognomic symptoms. The most violent case was a mulatto man, who was suddenly struck down, while in attendance on an officer, about midnight on Saturday, by an alarming rigor, accompanied with most agonizing pains in the back and lower limbs, was conveyed to the hospital on Sunday morning, and died on Wednesday night. The disease in 9 cases out of 10 was mild, rarely confining the patient more than a week, and in the worst cases running its fatal career in four or

five days. The Surgeon of the French frigate was a melancholy instance of the latter; a young man of full habit and high health, who, on Monday morning was in the enjoyment of his usual health, and on Saturday we followed his corpse to its burial place in a strange and foreign land.

A French frigate and brig were lying in the bay, in both of which vessels the epidemic made its appearance. The medical officers, inexperienced in yellow fever, adopted a simple saline treatment, the inefficiency of which, in its results, when compared with the strong depletory measures used by Dr. Hulse at the naval hospital, induced the French Commodore to request of Commodore Dallas the use of the naval hospital and the benefit of the experience of Dr. Hulse, which of course was granted. It was the exposure, resulting from the superintendence of this movement, which caused the death of their senior Surgeon.—Confiding implicitly in the belief of the atmospheric causes of the epidemic, they proceeded to the Havana in the midst of it, and I believe lost but a single man after leaving Pensacola; it being healthy in the Havana at that time.

The prophylactic measures during the epidemic were plain.—They consisted in avoiding carefully much exposure to the sun; in having your sleeping apartments well guarded against any vicissitudes, which might happen during the night; in avoiding excesses in eating and drinking; and in keeping the bowels soluble; these means, if placed in a situation to be attended to strictly, would, in all probability, confer an immunity from the epidemic, or if not that much, would materially modify the attack. The treatment adopted in this fever was altogether and decidedly antiphlogistic. It was never necessary to employ blood-letting more than once; that was a decided one in the onset of the disease. Calomel as a purgative we found an invaluable agent; and its continuance in small doses, merely to keep up the action on the bowels, without any view to its specific action, was decidedly beneficial. The local means were all directed to the stomach, to stay the peculiar tendency of its inflammation. Ice was probably the most efficient as well as the most gratifying remedy to the patient; and the administration of calomel never interfered with its liberal use.

In most cases, the calm and unclouded state of the mental faculties, even while the doomed patient was ejecting from his stomach in copious volumes the unerring evidences of approaching death, was remarkable.

The type of the fever varied as the epidemic declined. It appeared gradually to rise, attain its maximum and then decline.—And the treatment varied accordingly, but only in the more mild use of the antiphlogistic means. After the first decided frost the yellow fever disappeared as suddenly as its first appearance, and the men were then affected with simple intermittent, incident to the change of the seasons. The convalescence in most cases was rapid and sure. In some few, however, the attack laid the foundation of cronic diseases of the liver and stomach. About the latter part of November the crew were all removed aboard, and it was with some apprehension on the part of those gentlemen, who believed the exciting cause of the fever to be more local than general, that we got under way from Pensacola and proceeded to Norfolk. Nothing of any moment, however, happened on the passage.

ART. II.—*Observations on Cyanide of Potassium as a Remedial Agent.* By Mr. DAVID STEWART, of Baltimore.

THIS compound of cyanogen has been recommended as a substitute for prussic acid, and when it is desirable to obtain the effects of that valuable agent in combination with medicines which cannot easily be administered except in powder, it is a convenient substitute for it. Several difficulties however attend its use in any form. One of the most formidable is its variable effect resulting from its partial or total decomposition on entering the stomach—an effect which unfortunately cannot be controlled by the physician, as the weakest acid will decompose it in preference to uniting with carbonate of soda, magnesia, or any other compound with which it is usually administered. Should it meet with free carbonic acid in the stomach, prussic acid would gradually be eli-

minated, producing the pleasant effects which often result from its exhibition; but when it meets with a stronger acid in sufficient quantity, 10 minims or ፬ i of prussic acid are at once liberated, causing vertigo, peach kernel eructations, and other distressing consequences.*

In an article published in this Journal, Vol. 1, No. 1, p. 264, I endeavoured to show, from the authority of some of the first chemists in Europe, that it was very liable to vary in strength during the most careful preparation, and that it is extremely apt to suffer decomposition from various causes, after it has been prepared in the most judicious manner. Its subsequent introduction into the new Pharmacopœia, and its popularity among the physicians of our city, have led me to test the veracity of the eminent chemists† referred to, as to its variable quality. I procured six samples from six of the best retail stores of Baltimore, where the great proportion of prescriptions are compounded. Each was carefully weighed with the same weight, and immediately transferred into a solution of nitrate of silver in dilute nitric acid, using the same proportion of nitrate in each case. The result was an insoluble precipitate of cyanide of silver, corresponding with the proportion of cyanogen existing in the cyanide of potassium.

The first was prepared according to the process of U. S. Pharmacopœia, modified by the use of a water bath in evaporating the salt.‡ 5 grs. yielded,	}	11 grains of cyanide of silver, or about 109 grains of prus. acid.
No. 2, prepared from alcoholic solution— [See Maryland Medical Journal, Vol. 1, No. 2, p. 201] 5 grs. yielded,§		5 grs. cyanide of silver, or 49 minims of prussic acid.
No. 3, prepared recently as No. 1. 5 grs. yielded,	}	9½ grs. cyanide silver, or 94 prus. acid.
No 4. 5 grains yielded,		6 grs. cyanide silver, or 59 grs. prus. acid.

*These results have followed its exhibition in medium dose on several occasions in our city, in the hands of some of the most eminent physicians, and those who have used it most frequently.

†Dr. Trouve, MM. Pelouse and Gieger, and M. Boidet.

‡G. W. Andrews, M.D., suggested this modification at a meeting of Maryland College of Pharmacy.

§The gentleman from whom I obtained this sample has since given me the assay of 5 grains recently prepared by the same formula which indicates 95 grains of prus. acid.

No. 5, prepared by one of the most careful and experienced manufacturing chemists in Philadelphia. 5 grs. yielded, } 7 grains cyanide silver, or 69 minims prussic acid.

No. 6, French manufacture. 5 grs. yielded, } 6 grs. cyanide silver, or 59 minims pr. ac.

I think we have now proved from the best authority, and from actual experiment,

First, That if cyanide of potassium could be prepared of a definite strength, its effects must vary exceedingly, and that its use may be attended with the most dreadful consequences, should several doses accumulate in the stomach or intestines, and be followed by an acid.

Second, That it is liable to be decomposed during the most careful preparation.

Third, That when prepared in the best manner it is constantly liable to change, from causes that cannot be avoided, in dispensing it.

Fourth, That the process of the U. S. Pharmacopœia modified by evaporation in a water-bath is the best process yet proposed for preparing it.

Fifth, That its only value with reference to prussic acid is the facility with which cyanide of silver is formed by its decomposition, as indicated in the assay of the above samples. Moreover, I may remark that the necessity for a substitute for prussic acid has ceased,—since the merest tyro can prepare that acid extemporaneously of invariable strength, without any apparatus except a glass vial, by the beautiful process of the last Pharmacopœia.*

ART. III.—*Surgical Cases*. By E. W. THEOBALD, M.D., of Baltimore.

BENJAMIN GARLAND, aged 40 years, a labourer on the Baltimore and Ohio rail road, had his feet severely injured, Nov. 2d,

*Should the muriatic acid used in the process referred to be in excess, (in the absence of a specific gravity measure,) it will only tend to preserve it; and if the chloride of silver is lost, the result is less expensive than the commercial prussic acid.

1842, by the wheel of a car passing over them. The proximal phalanx of the great toe of the right foot was fractured, the end of the same toe cut off, and the soft parts about the metatarso-phalangeal articulations of all the small toes, of the same foot, very much torn and contused. The soft parts of the left foot were also bruised to some extent, but the bones were uninjured. His suffering was so great, that he fainted from excess of pain. An anodyne was administered, the wounds dressed, and he was ordered to be taken home.

After an interval of a few hours, as he still suffered considerable pain in the right foot, we ordered the dressings to be wet with the watery solution of opium, and the anodyne to be repeated.— At 4 o'clock P. M. he was comparatively easy. The watery solution of opium was continued, with directions to repeat the anodyne if the pain should return; and at bed-time, to take a powder composed of xij gr. protochloride hydrarg. and gr. j of pulv. opium. The next day the patient was tolerably comfortable, and every thing promised a speedy recovery. Warm applications were ordered to be applied to the injured parts; and an anodyne was directed to be given each night at bed-time.

On the 3d day the sloughing process commenced, which was combated with the fermenting cataplasm. In a few days we were gratified at finding the line of demarcation, between the dead and living parts, drawn over the point of fracture. At this time the patient appeared to be doing remarkably well.

On the morning of the 10th November, his pulse was soft, full, and of sufficient force; tongue clean; appetite good. His bowels had not been evacuated for 24 hours. The fermenting cataplasm was continued. A powder of pulv. rhei and calcined magnesia $\bar{a}\bar{a}$ 3 ss was prescribed as an aperient. Nov. 16th, the patient was feeling remarkably well, the slough, (which proves to be superficial) had in part come away, displaying healthy suppurating granulations beneath. The medicine taken the day before had the desired effect; no pain in the foot; slept well through the night, until towards morning, when he was troubled with unpleasant dreams which caused him to start and (as he expressed it) to twitch about the body. He also complained of a little stiff-

ness about the jaws. These symptoms excited for a moment some suspicion, that they might be the forerunners of tetanus; but every other circumstance attending the case led us to a different conclusion, that they might be the effects of the anodynes he had been taking. Under this impression, therefore, we ordered the anodyne to be discontinued the following night and the cataplasm continued. On the morning of the 12th we were astonished at finding our patient materially altered for the worse.—Had suffered through the night with the muscular twitchings, and the jaws gradually becoming stiffer, difficult deglutition, sense of weight and uneasiness about the præcordia, which upon placing the hand was discovered hard and somewhat distended. An examination of the foot displayed to us flat, unhealthy, dry, and light coloured granulations. The pulse moderately full, but very slow, and universal coldness of the surface. We decided upon an energetic course, and carried it out promptly.—150 gtt. of tinct. opium were administered; the foot was bathed in spirits turpentine. An epispastic was placed on it, as soon as it could be procured, mustard sinapisms over præcordea and along the spine, cups sufficient to take $\frac{3}{4}$ vi of blood were applied to the spine, xx grs. of calomel were given, hot brandy toddy to be taken at intervals, bottles of hot water were also placed around his body and friction practised over the extremities. At 4 o'clock P. M., we were pleased to find his condition much improved, the rigidity of the muscles somewhat reduced, pulse full, soft and more frequent, moisture diffused over the surface, uneasiness and hardness about the præcordea disappeared to a considerable extent. Directed the remedies to be continued and warm fomentations to the abdomen. Nine o'clock P. M., condition much the same, directed a tea-spoonful of tinct. opium, the blister to be removed and the foot dressed with basilicon ointment, warm applications to the præcordia continued, x grs. of calomel to be taken, and the laudanum to be repeated at midnight. Nov. 13th, half past 7 o'clock A. M., slept tolerably well through the night, pulse full, soft and regular, but evidently weaker, countenance somewhat paler and of a leaden hue; spasm of the muscles with increased ~~tension~~ tension of the abdomen and rigidity about the neck and jaws, ac-

accompanied by slight opisthotanos; deglutition more difficult, the bowels had not been moved, surface of the body soft, warm and moist. Directed warm applications to be continued, the foot to be dressed as before and to take the comp. infus. of senna; laudanum to be repeated. These remedies were continued, the symptoms however, increasing in violence, up to the time of his death which took place about 12 o'clock that night. The circumstances attending this case were not such as to justify us in the opinion that amputation of the extremity, after decided symptoms of tetanus had developed themselves, would have benefitted the condition of this unfortunate man.

Of those surgeons whose opportunities for observation have been great, we have the combined experience of Sir Jas. McGregor, Sir Benjamin Brodie, Dr. Hennen, Mr. Guthrie, Dupuytren, Sir Astley Cooper, Mr. Grimstone, Druitt, Liston, Hooper, and I may also add Baron Larrey; for although this gentleman amputated in several cases, yet he does not advise its performance. He expressly forbids the operation in any other than chronic cases, or where the disease is not fully formed, and in a few cases where the ginglymoid joints are involved in the injury. He also agrees with Sir James McGregor in the opinion that no good can result from a division of the nerves leading to the affected part. Now the fact with regard to this case is, that the disease was fully formed before we were aware of its approach, and one object of this publication is to guard the young practitioner who may meet with a similar case, against the insidious attacks of this fearful malady. The symptoms which displayed themselves on the morning of the 11th, it is true excited our alarm, but we suffered the previous and (apparently) present favourable condition of our patient, to lull all suspicion and to attribute those dreadful premonitions to the effects of opium. Had we been aware of the true state of the case and employed the means which were afterwards used, the result might have been otherwise. Arrayed against us, who can say, that in this enlightened age of medicine and surgery we might not have overthrown and conquered one of nature's deadliest foes.

The 26th November, 1842, I was called to see Charles Whittemore, a young man, aged 21 years, who had a few hours previously sustained an injury of the left hand, by the bursting of a gun barrel. I found upon examination the metacarpal bones of the middle, ring, and little fingers, and the proximal phalanges of the ring and little fingers fractured, the articulation of the index finger and its metacarpal bone dislocated, and the soft parts of the palm of the hand lacerated from the ulnar side of the wrist, extending diagonally across between the index and middle fingers upon the dorsum of the hand an inch. The hemorrhage had not been great, but the pain excruciating. The cut in the palm was closed by the interrupted suture, the fractured bones adjusted and the dislocation reduced, a compress was placed in the palm and a roller applied, both wet with the watery solution of opium and directed to be kept so. An anodyne was administered, and the patient put to bed. At 9 o'clock P. M. he took x. grs. of submur. hydrarg. and the anodyne was repeated. On the evening of the second day warm anodyne applications were substituted for the cold watery solution of opium. Inflammation did not run very high and healthy suppuration soon came on. From the extent and character of this injury, I was very apprehensive that tetanus would display itself; consequently, I watched the case with more than ordinary solicitude from the 3d to the 15th day. The warm anodyne applications, the internal exhibition of laudanum and an occasional aperient were continued up to this time; when the hand was dressed with Turner's cerate, and placed upon a convex support or splint. The general health and habits of this patient previous to the injury, were, as in the case above related, very good. Here we have two cases, which had sustained similar injuries, one of the foot, the other of the hand, the former a man somewhat advanced in life, the latter young. And although injuries of the feet are more dangerous than those of the hand, yet in this instance the hand was by far the most extensive injury. Their previous health and habits similar. The chances of recovery would seem to be nearly equal, nevertheless one dies, and the other convalesces without an unpleasant symptom. The lesson to be learned from an examination of the two cases, is

plain and easy. Never be too hasty in taking a step which cannot be retraced. Had I been led, from the unhappy result of the one case, to amputate this young man's hand to avoid a similar misfortune, I should have done myself no credit and him an irremediable injury; as it is, he is well, with a hand not even deformed, with which to earn his livelihood.

Reviews.

Clinical Aphorisms: A Contribution towards the History and Treatment of the Endemic Bilious Fever of the Eastern Shore of Maryland; designed for the use of the Young Practitioner. By PEREGRINE WROTH, M.D., Honorary Member of the Philadelphia Med. Society. Chestertown, Md. 1842, pp. 217.

THIS work of Dr. Wroth was undertaken for a useful purpose, and is executed in a very satisfactory manner. Its object and plan are sufficiently explained in the Preface. "It may be found," says the author, "that every practitioner of ten years' standing is already acquainted with every practical precept in this small volume. *For such it was not intended.* It is for the young, the uninitiated, who cannot draw on the resources of experience, and who will search in vain in medical libraries for a work which details with sufficient distinctness and minuteness the daily routine of professional procedure. The author does not claim originality in all his etiological views, his pathological opinions, or his practical deductions. He has unscrupulously availed himself of the assistance of preceding writers, where such could be found suitable to his purpose; and he has thus, without borrowing much, rendered them tributary to his design. Innumerable truths have long become the common property of the profession; and a modern writer of experience might be easily detected in inculcating doctrines which had been taught and published long before, though he had never heard the names of their authors."

The work commences with a few pages on the subject of the Topography of the Eastern Shore of Maryland,—an important and interesting topic, upon which, much to our regret, the author furnishes but little information. The rest of the treatise is divided into nine chapters. The subject of the first and second of these is the causes of fever; of the third and fourth, intermittent

fever; of the fifth, remittent fever; of the sixth, the treatment of intermittent fever; of the seventh, the treatment of remittent fever; of the eighth, the congestive state of bilious fever; and of the ninth, the structural changes which fever occasions in the liver and spleen. Of the opinions expressed under these several heads, it is not our intention to offer an analysis. The greater part of them are of course, and according to the author's acknowledgement, sufficiently familiar to all but the youngest members of the profession. We shall therefore content ourselves with noticing a few of the more prominent doctrines which occur in the work, as a specimen of the general character of its pages.

Respecting the *cause* of the endemic bilious fever, Dr. Wroth adheres to the old doctrine of marsh effluvia, and without referring to the forcible attacks made upon it by Currie and by several distinguished writers of the present day,—attacks by which the doctrine, if not overthrown, has certainly been shaken to its very foundation.

“I do not hesitate to admit, as a fact susceptible of the strongest proof, that marsh effluvia, miasmata, or malaria are the efficient cause, the *sine qua non*, in the production of those autumnal bilious fevers which desolate all tropical and many parts of temperate latitudes (p. 30.) It is on all hands conceded that autumnal fever is the consequence of the action, remote or immediate, of that unknown and intangible agent, malaria or miasma, on the human body. To believe or to dispute this position may be considered as a test of professional orthodoxy.” (p. 36.)

We are inclined to consider these assertions much stronger than the present condition of scientific knowledge will justify.—There is much reason to doubt the existence of any marsh malaria capable of causing remittent and intermittent fevers. There is still more reason for denying that malaria is the only cause of such fevers. Many of the most accurate observers, and some even of the zealous advocates for the influence of marsh air, have admitted the occasional agency of other causes. Dr. Wroth himself, in a subsequent part of his work, refers, with apparent approbation, to the statement of Alibert, that malignant intermittents sometimes rage in hospitals which have no marshes in their

neighbourhood, and where no other infection could be suspected than that which arose from too great a number of persons crowded together in one place.

Dr. Wroth thinks that it may be made a question whether our autumnal bilious fever, in some of its worst forms, may not be an infectious disease. He states several cases which have led him to suspect that "the effluvia from the bodies of the sick, in rooms not perfectly ventilated though kept clean, possessed some if not a principal share in producing the disease in those who were in constant attendance on the sick."

"It is admitted that an universal conviction of the infectious nature of this disease would limit the exertions of benevolence, and paralyze the hand of charity. Few would venture into an atmosphere charged with an unseen enemy whose dart was *sure* to strike, and whose wound might be fatal. But a love of truth compels me to repeat that *few escape who watch by the bedside of the sick and dying in confined apartments, in the worst forms of this fever.* This opinion is the result of an experience derived from a practice of thirty years, and it is sanctioned by authorities not to be despised." (p. 54.)

The opinion expressed by a friend of the author, in a note on the following page, is one which readily occurs to the mind, and is sufficiently probable to diminish, if not to destroy, the effect of most of the cases which we commonly hear urged in favor of the contagious power of bilious fever.

"It is, in the opinion of the undersigned, more conformable to the general character of bilious or miasmatic fever, to refer the extension or multiplication of cases which frequently proceed from isolated, and severe protracted cases of that fever, to the debility consequent upon fatigue, watching, anxiety and general derangement of the regular and accustomed habits of those who are thus attacked. Debility is known to be a powerfully exciting cause; and the above causes are certain to produce it in some degree." (Note, p. 55.)

In speaking of the cause of the periodical paroxysm of intermittent fever, Dr. Wroth refers to the observation made by Dr. Balfour in India, of the remarkable coincidence between the ac-

cessions and relapses of fever and the novilunar and plenilunar periods.

“Without any knowledge of BALFOUR’s opinion, and without any suspicion of lunar agency, I had for many years observed and frequently mentioned the circumstance to my professional brethren, Doctors BROWNE and FISHER, of Kent county, that both in our winter and autumnal diseases there would occur a *number of new cases* within the space of a few days, and afterwards *very few* for about two weeks. After reading BALFOUR’s work I kept, in 1839, a register of all the cases which occurred in my practice; and an examination of that register affords abundant proof that *five-sixths of them commenced within three days before or after the new and full moons.*

“Without acknowledging my full conviction of the truth of Dr. BALFOUR’s theory, I confess that there is sufficient reason to suspect that the coincidences which he and upwards of fifty other practitioners concur in stating, could not be altogether fortuitous.” (p. 75.)

In the chapter on remittent fever, an important caution is stated, which cannot be too deeply impressed upon the mind of the young practitioner.

“Some cases have been seen to terminate favorably, without remedies, by a spontaneous diarrhœa. The arterial action never rises high, the tongue continues moist and but little changed in appearance, and regular remissions occur throughout; there is little or no pain in the head or lumbar region, and no abdominal tenderness. Let no physician, however, be induced by the apparent mildness of the symptoms, to stand by as an idle spectator. A fever *may* prove ephemeral, or be mild throughout, but it also *may*, after a very mild commencement, assume, in the second or third exacerbation, symptoms of immedicable severity.” (p. 84.)

In the treatment of intermittent fever, Dr. Wroth has in only one instance made trial of Mackintosh’s practice of bleeding in the cold stage. In that case, the disease was apparently shortened; but as a general rule, he considers it safer to defer depletion until the accession of the stage of excitement.

“It is difficult to mark by any certain signs those cases which will allow the loss of blood in the chill, and those which will not.

Where the symptoms of congestion are clearly marked, and especially where a livid face and pain in the head show the brain to be the principal seat, or that part where most danger is to be apprehended, then blood taken from the arm cautiously, observing the effect and closing the orifice, when relief is obtained, will produce a speedy solution of the paroxysm. This relief will consist in the speedy disappearance of the rigors, the breathing will become freer, and less hurried, the pulse fuller, and warmth will be diffused over the system." (p. 102.)

The employment of the lancet during the chill is, we believe, rarely advisable, and still more rarely necessary; and even in those cases where it has appeared to relieve the immediate paroxysm, it has generally been found to produce an injurious effect upon the disease, by either increasing its violence or protracting its duration.

The administration of sulph. quiniæ in intermittent fever should be limited, according to Dr. Wroth's experience, to the stage of perfect apyrexia.

"I have seldom used it," he says, "in imperfect intermissions without injury. If quinine or the bark, even where there was a perfect intermission, be continued after the time for the recurrence of the chill has passed, *and during the time the stage of excitement would have existed*, the consequence will surely be an increase of heat and of the force of the circulation. This fact has been noticed by Fordyce and others, but I have never seen the action thus induced rise so high as to endanger the patient. Soon after the sweat shall have reduced the pulse to the natural standard, the exhibition of the sulphate of quinine should be commenced. In common cases it will only be necessary to give one or two grains every two hours during the intermission, until about six hours before the expected return of the chill, when it should be given every hour, and in double doses. I have never exceeded five grains at a dose, though ten or more have been given without injury. One thing is deemed worthy of notice. After the chill has been arrested, there is frequently danger of relapse; and since I have adopted the practice of giving the bark or its extract, in substance or infusion, after convalescence begins, continuing its use for a few days or a week, three or four times a day, with mild aperients occasionally, relapses have been of rare occurrence."

The remedial measures recommended in the treatment of intermittent and remittent fever are in general highly judicious, corresponding for the most part with the practice of the best recent writers, and sanctioned by the author's personal experience. Dr. Stokes' mode of employing blisters with silver-paper interposed between them and the skin, and suffering them to remain on only until a decided sense of smarting is produced, is objected to as entirely useless to the patient. Dr. Wroth is of opinion that the full effect of blistering is, in many cases, so important, and is so seldom obtained short of vesicating, and the evils resulting from strangury, &c., so inconsiderable, that we should not hesitate to incur the risk of a trifling mischief in order to secure a greater good. In this condemnation of the method of the great Dublin teacher, we by no means concur. We cannot regard the strangury and excessive general irritation, which often result from the long-continued application of a blistering plaster, as trifling evils. And we know from ample experience, that the fullest vesication may be produced by Dr. Stokes' mode, without incurring the danger of exciting these painful consequences. If the epispastic be kept on until the patient complains of decided smarting, and the subjacent skin is reddened, the subsequent application of any ordinary dressing, as cabbage leaves or a common poultice, never fails to be followed by an abundant effusion of serum and as thorough vesication as cantharides are capable of exciting. And when employed in this manner, we have found blistering to occasion the most satisfactory results, and have never known it to give rise to strangury or constitutional irritation in even the most delicate patients.

One of the chapters of Dr. Wroth's work is devoted to the consideration of the *congestive* state of bilious fever. The symptoms of this disease are stated as follows:—

“The precordial oppression is more remarkably severe—the countenance more disturbed and anxious—the paleness of the face assumes a dingy hue—the breathing is irregular, anxious, and *sighing*; there is great dejection of spirits; the extremities are cold—there is a dull, obscure, deep-seated pain in the head—dulness of the eyes, and, for the most part, some injection of the

sclerotic coat, and confusion of intellectual manifestations, accompanied by great *apparent* debility or prostration of strength.

"After a time, longer or shorter in proportion to the violence of the case, *some* reaction takes place, and the surface becomes somewhat heated, the eyes more suffused and dull, and the pain in the head more severe. Sometimes we see incoherence of the mental operations, delirium, and, at last, coma. The congestion of the organs continuing, the pulse never becomes full and bounding, but is small, contracted, and oppressed. (p. 171.)

"Probably the most remarkable difference between a common inflammatory intermittent and a congestive fever, may be found in the fact that, in the former, the congestion is completely removed by the access of the hot stage, while, in the latter, the hot stage is more imperfectly developed, and the portal and other congestions remain, or, in other words, in the simple and inflammatory forms of fever, there is a much more full development of superficial heat than in the congestive. In the latter, the temperature, though *sometimes* increased, is frequently not above, and often much below, the standard of health. The one may be called centrifugal, the other centripetal." (p. 175.)

The treatments advised in this form of fever consists principally of venesection, emetics, large doses of calomel, and epispastics to the abdomen,

"In a majority of instances more danger will be incurred from the omission than from the employment of blood-letting. Let a vein, then, be opened; and if no blood can be obtained from the veins, and if the head be the principal seat of the congestion, the temporal artery, and let blood be taken, at first slowly and cautiously. The loss of a few ounces will not produce dangerous exhaustion in the *early stage of any disease*.

"The most inexperienced physician will soon be taught by the mode in which the blood shall escape from the orifice, and by the effect on the pulse, whether the operation be salutary or otherwise. If the blood continue long to trickle down the arm, and at the same time the pulse, before weak, become more feeble and indistinct, the orifice may be closed in time to prevent serious mischief. In such circumstances, a stimulant, such as wine or brandy, should be always at hand that it may be used if the pulse fail. But if the blood, at first coming from the puncture by drops, at length springs from the arm and falls into the basin with some force, the pulse simultaneously rising in strength, no doubt can be entertained for a moment of the propriety, nay, of the necessity of the measure. The nearer the approach made by the stream

of blood, as it issues from the arm, to a straight line, the stronger the jet which it makes from the orifice, the more urgent the necessity for abstracting it.

“When the pulse evidently increases in strength as the blood flows, the orifice should be allowed to remain open until a perceptible diminution of the force of the pulse be felt. The result of this practice will frequently be the conversion of a congestive into a simple fever, the treatment of which has been laid down in preceding pages.” (p. 178.)

The use of the lancet should be succeeded by an emetic of antimony or ipecacuanha, unless there be evidence of cerebral engorgement. If this fail to afford decided relief, it should be followed by calomel in doses of fifteen or twenty grains, to be repeated every two or three hours, until the vitiated secretions of the liver and intestines are removed. The state of the circulation sometimes requires the employment of wine, brandy, camphor, opium, carbonate of ammonia, and sinapisms. Profuse and exhausting alvine evacuations may demand the exhibition of cretaceous juleps, with laudanum and starch injections. Bark, quinine, and other tonics, the author has invariably in this form of fever found to be injurious.

The remarks, in the last chapter, on the origin and treatment of enlargement of the liver and spleen are in general judicious.—In the treatment, however, of splenic physconia, we are compelled to differ very widely from Dr. Wroth. We differ from him in regard both to what he advises and what he omits. The mercurial alteratives, which he recommends, are, according to our experience and to that of many of the best medical authorities of the present day, almost uniformly injurious. Bark, quinine, and the preparations of iron, of which he says nothing, we consider eminently beneficial, and in many cases indispensably necessary to the restoration of the organ to a healthy condition.

In concluding our hasty remarks upon Dr. Wroth's work, it is proper to state, that although we are compelled to doubt the accuracy of some of its author's observations and to dissent from some of his conclusions, we regard his treatise as in many respects a good one, and calculated to be useful to the class of readers to whom it is addressed. Its merits are those of just arrang-

ment of its topics, and a simple and perspicuous statement of its writer's views. Its faults are rather negative than positive, depending not so much upon any erroneous doctrines which it contains as upon the omission of much important information properly belonging to its subject, and which might easily have been introduced. The pathological anatomy of the diseases spoken of is passed over in silence, probably in consequence of the difficulty experienced by physicians in the country in making necroscopic researches. The medical topography of the remarkable district in which the author has so long, usefully, and honorably pursued his profession, is dismissed in a few brief and general paragraphs. This neglect is doubly to be lamented, as the subject has never been treated by any physician who has enjoyed opportunities for personal observation, and as a writer of Dr. Wroth's abilities and experience could scarcely have failed in discussing it to communicate much information that would be interesting and valuable.

Lectures on the Theory and Practice of Physic. By WILLIAM STOKES, M.D., *Lecturer at the Medical School, Park street, Dublin, &c.*; and by JOHN BELL, M.D., *Lecturer on Materia Medica and Therapeutics, &c.* Second edition. In two vols. 8vo. pp. 604, 732, Philadelphia: Barrington and Haswell: 1843.

THE lectures of Dr. Stokes, which form a part of these volumes, have long since acquired a distinguished reputation for discriminating and practical views of the various subjects which they treat. Their author's merits as a medical philosopher are familiarly known and justly appreciated by every professional reader. His lectures on the practice of physic are among the most valuable of his writings. Their liveliness and vigor of style, and the originality and importance of the doctrines which they inculcate, have justly secured them an exalted position among the best classical productions of medical literature. In reading

them we are hurried onward by a feeling of interest and pleasure almost equal to that excited by the pages of Fielding or Le Sage, and when we finish their perusal, we lay them down with a blended sentiment of admiration at their excellence and regret at their brevity.

Dr. Stokes' lectures, however valuable, are far from comprising a complete system of practical medicine. Many important diseases, and indeed several important classes of diseases, are wholly untouched. And in the discussion of the subjects which are introduced, the reader has occasionally to regret the author's undue haste and conciseness. These deficiencies have, in the present work, been to a very considerable extent supplied by the useful labors of Dr. Bell. Continuing the form of lecture, that gentleman has filled up the system of practice by furnishing many parts which were omitted by Dr. Stokes, and by affording fuller information upon various topics where Dr. Stokes' remarks appeared not sufficiently ample. With such additions and improvements, we consider the work one of the best of its kind with which we are acquainted.

Of the contents of so extensive a publication on so many various subjects it would be difficult to give any very detailed or exact account. And such an account is probably but little necessary, as the work, from its merited celebrity, will doubtless be generally and widely diffused among the members of our profession. We have been tempted, however, in running over the pages of these lectures, to mark some of the most striking passages; and we shall give a brief abstract of them, from our conviction that they cannot be too early brought to the knowledge of those who have not read them, or too deeply impressed upon the memory of those who have.

The first volume treats of diseases of the digestive system, of the biliary apparatus, and of the pancreas and spleen.

Dr. Stokes in his opening lecture lays before his readers the most beneficial and liberal mode of prosecuting the study of medicine. He discards the arbitrary division of medical study into the domains of medicine and surgery; vindicates the claim of ancient writers to the respect of the moderns, and shows that but for

the labours of the former in paving the path of medical science the latter would not walk so readily to distinction. He most justly reprobates the limitation of our investigations by the boundaries of sects,—and teaches that for the most profitable advancement we must combine the exact observations of pathology with those of general derangement, and must admit, to some extent, the rational empiricism of specific remedies, when sustained by sound experiments.

Regarding fever in its simple form as the exception, and its complication as the rule, Dr. S. reverses the order of teaching, and commences with those local diseases which are the foundation of fever, rather than a general view of the various forms of this morbid condition. In thirteen lectures he gives some of the diseases of the digestive system, commencing with gastritis. He denies the universal coexistence of enteritis and gastritis as asserted by Broussais, gives some symptoms of this disease not noticed by authors generally, such as dysphagia, oppression of the præcordia, with globus and a sense of constriction, and sometimes hiccup marking inflammation of the cardiac orifice. He inculcates that there is no constant relation between the appearance of the tongue and the condition of the stomach. No single symptom marks this disease but all must be taken together to establish its existence. Upon the principle that blisters in the neighborhood of inflamed organs often become stimulants to them, he shows that this class of remedies are frequently used injuriously in gastritis. His great reliance is upon local bleeding by leeches, and the internal use of ice; and when blisters become necessary, they should be covered with silver paper and left on only until they produce smarting. He teaches that hamatemesis and delirium tremens are often complications of gastritis, and when they are, astringents in the former and brandy and opium in the latter are inadmissible; they should be treated by leeches to the epigastrium and the administration of iced water. He cautions against permitting the prominence of delirium tremens to obscure the original gastritis.

Chronic gastritis is often mistaken for dyspepsia and consequently maltreated and confirmed. Its complications are not so

frequent, nor so well marked as in the acute disease. He strongly cautions against the use of tonics for supposed functional derangement, and equally warns against the continuance of depletory measures after the inflammatory condition has been subdued. Dr. S. speaks strongly in favor of the use of acet. morph. in those cases accompanied by pain and acidity; commencing with the twelfth of a grain twice on the first day, three times on the second, and continuing until the patient takes from half a grain to a grain and a half in twenty-four hours.

Long continued counter irritation he regards as a remedy of much importance. The ordinary ungt. tart. antim. he thinks too strong and recommends in its stead ʒjss. tart. antim. to ʒviij. of lard.

Duodenitis.—But little is said upon this subject. Jaundice is a general concomitant, upon the principle that stimulus of mucus surfaces induces increased secretion from their ducts, hence duodenitis is a cause of yellowness in yellow fever.

Ileitis.—From its frequency and latency is a most important affection, and is the most frequent anatomical feature of fever.—Ileitis is the affection often called worm, remittent or bilious fever in children, and it is often found accompanying pthisis. Dr. S. thinks the term dothinerteritis is a mere refinement invented by those who suppose ileitis to be primarily seated in the glands. The glands in his opinion are seldom if ever affected without involving the mucous membrane, though this may be without involving the glands. In ileitis there is no vomiting and less thirst than in affections of the upper part of the alimentary canal; the desire is for warm drinks instead of cold.

The characteristic symptoms of disease of the colon are diarrhœa, tenesmus and the passage of morbid secretions; these are very slight, or are wanting in ileitis. There is seldom pain, and when it exists it is between the umbilicus and the crest of the ilium on the right side. The local affection in ileitis is often overlooked, and the patient is supposed to have simple continued fever. Dr. Stokes thinks that throbbing of the abdominal arteries is an important special sign of enteric inflammation. Inflammation of the lower third of the ileum is one of the most com-

mon secondary lesions of typhus fever, and is a frequent cause of death in this disease. Inflammation of the glands of Peyer and Brunner is a frequent cause of slow convalescence in fever; and when convalescence is protracted without any evidence of disease in the circulatory, respiratory or nervous systems, inflammation of the mucous glands of the digestive tube should be suspected.

Treatment of Ileitis.—The school of Broussais, Dr. Stokes thinks, made a mistake in never giving purgatives, and the British school as great an error in their too free use. The bowels should be unloaded by the mildest laxatives; but they should not be continued, and their use should be followed by a narcotic.—Enemata may be used without injury. Bleeding is not always necessary and should be used only once preliminary to leeching. Leeches are the great remedy, and the best place to apply them is midway between the umbilicus and the crest of the ilium. The subsidence of pain does not mark the cessation of the disease.—The internal remedies should be directed to relieving irritation. The pulv. doveri is a good combination; Dr. Stokes unites with it some mild mercurial, as hyd. cum cræta, giving two or three grains of each every second or third hour. The free use of gum-water is highly beneficial.

We regard the remarks of Dr. Stokes on page 194, vol. 1st, as particularly important. They relate to the necessity of supporting the patient, at the same time that we deplete for the local affection. It has ever been one of the opprobria of medicine to run into extremes, and while under one theory stimulants and excitants are used to an injurious extent, at another, every kind of aliment is guarded against as a dangerous stimulant. This tendency to extremes may arise not so much from partiality for a theory as from a mental indolence, willing to rest itself under one sweeping routine rule, rather than to tax its own powers in each individual case. A proper discrimination in the use of depletion and nutrition requires upon the part of the practitioner, the most cautious and cultivated judgment. Dr. S. asserts as a rule, that in certain periods of inflammation stimulants become antiphlogistics. So paradoxical a law must, it will be perceived, require great experience and facility of pathological interpretation to make

its application an available truth, rather than a dangerous experiment.

Diarrhœa should not always be interfered with ; it is the means by which the secreting surface relieves itself. If it becomes excessive and the powers of life are yielding, then it may be checked by the use of pulv. doveri and small anodyne injections.—Enteric disease imparts great tolerance of opium, and when this tolerance is manifested, the remedy is beneficial ; but when its narcotic effects appear from the ordinary doses, it does harm.—Dr. S. gave in one case one grain every hour until twelve had been taken.

Diseases of the Large Intestines.—Dr. Stokes contends that there is no anatomical difference between diarrhœa and dysentery ; he considers them both an inflammation of the lower part of the digestive tube. This view does not receive our assent, and is unsustained by the practical deductions. Derangement of function may result in diarrhœa, and, as we have been before told, the increased secretion is not always to be checked, while, undoubtedly inflammation is the lesion which gives rise to dysentery. Dr. S. says but little upon diarrhœa. When it is to be checked by remedies, he recommends laxatives and opiates ; a combination of pulv. doveri and pulv. rhei, increasing the pulv. rhei when a laxative effect is wished, and the pulv. doveri when it is necessary to soothe the irritation. In chronic diarrhœa, he recommends the use of the metallic astringents, balsams and turpentine. He gives acet. plumb. grs. ij, P. opii gr. $\frac{1}{4}$ ter. in die, and has never known it produce painter's colic ; it is more apt to do this when used externally. Strychnine is mentioned as useful, and is given in doses of the twelfth of a grain, made into pill with crumbs of bread and aromatic confection, three times a day. Bad effects from the sudden arrest of diarrhœa must be guarded against, by increasing the determination to the surface by means of the warm bath, frictions and blisters. Colliquative diarrhœa he regards as more the cause than consequence of hectic, and as being an inflammation of the intestines requiring corresponding treatment.

Dysentery is in anatomical character an inflammation of the great intestine. Epidemic dysentery occurs under two condi-

tions: as secondary to typhus; or with a combination of ileitis. The old notion that dysentery is caused by scybala in the intestines is erroneous, and so is the consequent treatment by purgatives. General bleeding is the most efficient means; next, leeching along the colon and around the anus. The best internal remedies are blue pill and pulv. doveri. Sometimes it is necessary to continue the mercury until the mouth is affected. Extraordinary effects have been produced by the administration of cream of tartar in half ounce doses every fourth hour; at first, it appears to aggravate the symptoms. Dr. Bell has a valuable lecture upon this disease, from which we learn, that the anatomical lesions have been found the same in all parts of the world. He does not admit an origin, in common with intermittent fever, from malaria, and does not think there is sufficient foundation for attributing to it a contagious character. He gives calomel for its purgative effect, but does not think it should be carried to salivation. He gives from ten to twenty grains, or five grains every three hours for two or three times, and prefers it alone to combination with ipecac., or ipecac. and opium.

Painter's Colic.—Dr. Stokes classes this disease among the neuroses. It is a lesion of function without organic injury, and is generally if not always caused by carb. plumbi. He recommends strychnine for the paralysis of colica pictonum. Dr. S. closes his remarks upon the digestive canal by two lectures upon intestinal worms.

Dr. Bell devotes several lectures, embodying much information, to the affections of the mouth and throat, and diseases of dentition. He also adds much that is valuable upon the subject of dyspepsia, or those functional gastric derangements which it would be a great mistake to confound with chronic gastritis. Among the physical and moral excitements originating this denouement, he ranks prominently the use of tobacco, and religious excitement, with crowded meetings.

Gastro-duodenal Dyspepsia.—This affection is often mistaken for liver disease. Its sympathies involve the heart, lungs, stomach and brain, and it is strongly marked by hypochondriasis.—The free use of mercurials is prohibited. If of a phlogistic char

acter, depleting treatment is of course required. Castor oil in ʒj doses every twenty-four hours has been found highly beneficial.

Colonic Dyspepsia.—From its relations with the stomach, liver and kidneys, derangements of the colon, may be mistaken for affections of those organs, or they may give rise to sympathetic colonic diseases. Colonic dyspepsia is divided into the atonic, inflammatory, irritable and follicular. The indications of cure are to remove accumulations, to facilitate the regular performance of the functions, and to correct the morbid condition.

After some remarks upon diseases of the cœcum and rectum, and an examination of the varieties of colic, Dr. Bell gives ten lectures upon cholera. He thinks that so far as a general rule can be adopted, the sedative plan is the most efficient in epidemic cholera; and mentions favorably the use of acet. plumbi, nit. argenti, and alum, in cholera infantum.

The first volume is closed by lectures on the biliary apparatus, by Dr. Stokes, and on the pancreas and spleen by Dr. Bell.

Jaundice is rather a symptom than a disease; its presence does not necessarily indicate a suppression of bile; we may have jaundice coexisting with even a copious flow of bile. The bile may be obstructed, and jaundice produced by biliary calculi, obliteration or adhesion of the ducts, or by the pressure of tumors upon them; these tumors being in the pancreas, duodenum, or pylorus. Another mechanical cause of jaundice is accumulation of scybalous matter in the bowels. Spasm of the duodenum or hepatic ducts, diseases of the liver, of the mucous surfaces of the stomach and duodenum, and the sympathetic action of the brain upon the liver, are among the causes of jaundice.

Dr. Stokes thinks that the jaundice of northern countries is converted into yellow fever in warm climates by the developement of gastro-duodenitis, to which those climates predispose.

The only proof of the removal of the disease is the discharge of bile by stool or by vomiting. The indications of cure are, to guard against inflammation, to allay spasmodic pain, and to favour the passage of calculi. The means are bleeding, leeching, purgatives and enemata, used in the order mentioned, and followed by

opium in full doses. Emetics are dangerous from their liability to rupture the distended gall bladder, and can only be used safely in the early stage when there is no obstruction from organic disease.

Acute Hepatitis.—Dr. Stokes gives an account of this well known disease with his characteristic accuracy, and of its well established active antiphlogistic treatment. He does not think mercury essential to its treatment, though it may be useful. When hepatic abscess has formed, and points externally, it is no indication that adhesion of the peritoneum has taken place, or that it can be opened with impunity. The best plan of proceeding is that of Dr. Graves, to make an incision over the prominence nearly to the peritoneum, plug with lint, and wait for the abscess to burst where there is least resistance.

In his lecture on chronic hepatitis, Dr. S. calls attention to hepatic neuralgia.

“Here is the diagnosis; pain in the region of the liver, with occasional violent exacerbations, and accompanied by tenderness of the integuments, but without swelling, symptoms of fever, or abdominal derangement; the disease being of long standing in a person of nervous habit, and having resisted bleeding, mercury, and even counter-irritation, or being made worse by those measures.” (p. 584.)

The treatment is carb. ferri. internally, and a plaster of belladonna over the pain.

Diseases of Pancreas and Spleen: Dr. Bell.—The diagnosis and treatment of diseases of these organs are obscure.

“The *diagnosis* of diseased pancreas is only to be reached by what our French friends term the way of exclusion; that is, by ascertaining that the complaints and pain of the patient are not referrible to original disease of the stomach or concave surface of the liver or gall-bladder, or duodenum, or even of the kidneys. Absence of any of these, or of tumid hypochondrium, may induce a reasonable belief of the disease before us depending on some organic lesion of the pancreas.

“The same remark applies to the *treatment* of diseases of the pancreas. When we have reason to believe, after minute investigation and inquiry, that our diagnosis points to inflammation of

this gland, we shall not hesitate to have recourse to antiphlogistic measures; among which venesection, cupping on the back, leeches over the epigastrium, and mild purgatives, preceded occasionally by a dose of calomel, will have a preference." (p. 588.)

The most common form of diseased spleen is chronic splenitis with enlargement.

"The treatment found most useful by Mr. Twining, in that modification of enlarged spleen which consists in vascular engorgement of the organ, was perseverance in a course of purgative medicines, combined with bitters and some preparations of iron; of which small doses of the *sulphas ferri* seem to be the most efficacious. His usual formula, for cases in which there was not much pyrexia, was:—

℞. Pulv. jalap,
 — rhei,
 — columbæ,
 — zingiberis,
 Potassæ bitart, āā ʒ i.
 Ferri sulphatis, ʒ iss.
 Tinct. sennæ, ʒ ss.
 Aquæ menthæ sativæ, ʒ x. Misce.

This prescription is called the *spleen mixture*. The dose is an ounce and a half for an adult, at 6 A. M. and repeated at 11 A. M. daily. For children the doses are regulated so as to produce not less than three, and not more than four stools daily." (p. 597.)

Dr. Bell traces an analogous pathological condition, requiring analogous treatment in chronic splenitis, chlorosis, and anæmia, and remarks,

"The leading indication is to restore to the blood its lost iron and fibrin—its colouring and nutrient elements. We fulfil this by the regular and prolonged use of chalybeates, generally combined with purgatives,—often with vegetable bitters. Bearing in mind the possibility of some important organ suffering under congestion or chronic inflammation at the same time, we shall not refuse to remove this local disease by the customary remedies,—a few leeches or scarifying cups, and, unless there be phlogosis of the digestive mucus membrane itself, by free purging. But these measures are not to interrupt, or more than very temporarily suspend, the main treatment, by chalybeates; nor must we be misled by the troubled circulation, the immense throbbing and noise in the large arteries, and the hurried and panting respiration, the frequent pulse, the hot and dried skin, into a belief

that these are symptoms of phlegmasia, or of febrile state with inflammation, calling of themselves for depleting remedies." (p. 602.)

The second volume consists of four lectures on *diseases of the Urinary Organs*, by Dr. Bell; twenty-three on *diseases of the Respiratory Apparatus*, six by Dr. Stokes, the rest by Dr. Bell; four on *diseases of the Heart*, by Dr. Bell; fourteen on *diseases of the Nervous System*, two by Dr. Bell, the others by Dr. Stokes; and finally, ten on the important subject of *Fevers*, two of them by Dr. Stokes, and eight by Dr. Bell.

Our necessarily narrow limits, and the extent of our remarks on the first volume, render it impossible for us at present to enter upon a review of these various topics. The character of the work is consistent and well sustained throughout. To bestow praises upon Dr. Stokes' part of it would be a labor of supererogation. The medical profession in this country are generally perfectly acquainted with its merits, and to urge upon them its claims to attention would be like gravely informing them that there is a useful preparation of mercury called calomel, or a valuable tonic known by the name of sulphate of quinia. Of Dr. Bell's lectures, we should perhaps speak with somewhat more of qualification and reserve. They are carefully and generally judiciously compiled, proving that the author has been a diligent student and is well acquainted with the medical literature of the day. In their literary character, a fastidious critic might perhaps object to occasional inelegance and inaccuracy, which contrast a little unpleasantly with the style of the European portion of the work. A more important censure might be directed against the diffuseness with which certain subjects are treated, while others of equal or greater moment are silently neglected. Thus we find six lectures devoted to the consideration of epidemic cholera, and not a word said on the subject of rheumatism. After making, however, every deduction from the character of Dr. Bell's labors which the most rigid critical justice can demand, they will be admitted by every candid reader to be entitled to commendation for knowledge and good sense. In conjunction with Dr. Stokes' lectures, which by themselves were only a beautiful fragment, they constitute a system of medical theory and practice which cannot fail to be eminently useful.

W. M. W.

Bibliographical Notices.

Institutes of Surgery, arranged in the order of the Lectures delivered in the University of Edinburgh. By Sir CHARLES BELL, K. G. H., Professor of Surgery in the University of Edinburgh, &c. &c. Philadelphia, 1843, 8vo., pp. 448.

THE first edition of this work was published in 1837, and was designed chiefly, as a text-book for the use of those who had attended or were attending Sir Charles Bell's lectures on Surgery in the University of Edinburgh. The proper character and object of a work of this kind are justly stated by the author:—

“The student of Surgery requires a book of ready reference. That book, to be useful, must recal to the reader's recollection the demonstrations and the reasonings which he has heard at lectures; for no book can be written which is sufficient for the practice of the profession. And it should state correctly, however shortly, the rules which are to guide the judgment and the hand of the practitioner, in the moment in which he is called upon to the performance of his high duties.

“The book should also contain references to some of the best authors, with a recommendation of those which ought to be read. But it is above all important that such a work should contain so much of criticism at least as may guard the reader against the bad influence of writers who have not known the hazards and difficulties of practice; who make unhesitating and bold assertions, where good and experienced men hesitate and are afraid; who write rather to obtain a name, (an object not altogether to be condemned,) than to guard their successors against the errors which they have witnessed, or to detail the means by which they themselves have happily succeeded.

“Knowing the opinions that prevail, I have sometimes in the present work entered into discussion in order to enforce the true

principle. But the greater part of the contents of this volume, I wish rather to be considered as the conclusions drawn from the prelections, than as intended to present the whole argument, or to cite all the authorities on which the practice rests."

Of the value of such a work if properly executed, not only to those who enjoyed the advantage of hearing its illustrious author's lectures but to all who are engaged in the study or practice of surgery, there can be but one opinion. Respecting the high merit of the present performance, there is an equal unanimity of judgment among all who have examined it. It is a work excellently adapted to the purpose for which it was intended, and which as a book of reference, at once learned and practical, cannot be too strongly commended to the attention of both students and practitioners.

A Demonstration of the Curability of Pulmonary Consumption in all its stages ; comprising an inquiry into the nature, causes, symptoms, treatment, and prevention of tuberculous diseases in general. By WM. A. McDOWELL, M.D., Louisville, Ky., 1843, 8vo. pp. 269.

The cure of consumption, the quadrature of the circle, the invention of perpetual motion ; which of these achievements in medicine, geometry, and physics has been oftenest accomplished?

Dr. McDowell expresses the hope, that readers may be found who will be induced to examine at least that portion of his work which more especially touches the momentous demonstration which he claims to have made. To the attention of such he points out the chapter on the curability of consumption, and the articles *iron* and *common salt* in the chapter on treatment. If the demonstration set forth in the title page be not in those references made out, he admits that it has not been accomplished at all ; but if made out, he contends, and with reason, that this will unquestionably entitle his work to a thorough reading.

On turning to the first of the chapters referred to, we find a statement of the opinions of Laennec and Andrel in favor of the curability of phthisis in its *latter* stages. This opinion is coupled by Laennec with the admission that in its *early* stages the disease is incurable ; in other words, that it can be cured only by the

processes which occasionally succeed the softening of tubercles and the formation of cavities in the lungs. Dr. M'Dowell maintains, on the contrary, that the absorbents are capable of removing tubercles from the lungs in the earliest stage of their occurrence, and before they have been softened. Tubercles, he says, which occur in the glands of the neck or other exposed parts of the body, are, as every physician knows, frequently removed without the process of ulceration. Why may not the same thing happen in the lungs? The lungs are abundantly supplied with absorbents. Pneumonic effusion and hepatization are often removed with extreme rapidity: It is inconsistent with our knowledge of the wonderful resources of nature to suppose, that for the removal of so very common a degeneration as tubercle there is no process but one that leaves the affected structure disorganized and mutilated. Cases are extremely common of tubercles in early youth becoming latent, and, as it were, hibernating in the system until the age of puberty, an interval of from seven to ten years. But this is the full average period within which the whole natural body is worn out, decomposed, removed, and renewed again, by the operation of the antagonistic functions of absorption and nutrition. Tubercles in the lungs must consequently during this period be absorbed and removed, if they be subject to ordinary vital processes. And if they be not subject to those processes, but subsist simply as foreign matter, or as so much solid albumen in any other situation, it is impossible to account for their continuance in the lungs for eight or ten years. Tubercles out of the body, if subjected to the same degree of heat and moisture as that which obtains in the lungs, become putrid and are perfectly decomposed in less than a month. So that whether organic or inorganic they cannot be supposed to have continued in the lungs from infancy up to the epoch of puberty. In either case they must have been removed, and in either case without the processes of ulceration and expectoration.

In reply to the question, which is the main question after all, and the only one on this subject of any real importance, *whether tubercles are ever known to be removed from the lungs without ulceration*, Dr. M'Dowell declares that he has had youthful patients

so attenuated that tumors in the mesentery could be felt through the parietes of the abdomen, when, at the same time, there were *symptoms and signs* of tubercles in the lungs. And when successful in their treatment, he has found, in every case where he particularly attended to this matter, that the indications of disease have disappeared from the lungs before they have subsided in the abdomen. In similar cases, not constantly confined to children, in addition to the abdominal and pulmonary indications, the cervical glands have been involved. In these cases he has witnessed the entire removal of pulmonary affections, before any perceptible diminution occurred in the cervical tumors.

With regard to the reasoning by which Dr. M'Dowell has been led to believe the curability of phthisis, we care but little. We view the matter as simply a question of facts, to be solved by observation and by observation alone. The Doctor's opinion is not peculiar to himself; it is entertained, though perhaps with less confidence, by some very eminent pathologists. We heartily hope, as every friend of humanity must, that it may prove to be correct. Sadly, however, do we fear that the true result of all past experience with consumption is summed up in the melancholy words of Dr. Latham, in his admirable lectures on clinical medicine. "If you ask me as a physician," says that able and accomplished practitioner, "whether I have ever had experience of a perfect and satisfactory recovery taking place, where there have been all the best known *popular* symptoms of phthisis decidedly marked, symptoms which (*as far as they go*) no physician could possibly say were not those of phthisis? I answer, "Often."

"But if you ask me whether I have ever had experience of the like perfect and satisfactory recovery where there were all these popular symptoms, and withal, the conditions proper to phthisis, ascertained by auscultatory signs to exist beyond a doubt in the lungs? I answer, "Hitherto never."

The principal indications in the treatment of phthisis, according to Dr. M'Dowell, are, 1st, to restore the healthy condition of the blood; 2d, to remove the tuberculous deposits from the tissues; 3d, to remove or to change the diathesis.

The degeneration of the blood consists in deficiency of red

globules and of saline and ferruginous constituents, and in excess of serum.

For correcting the deficiency of red globules, the *preparations of iron* are important agents. The following formula of Dr. Bland is the more efficacious form in which Dr. M'Dowell has used these remedies:—*R.* ferri sulph., potassæ subcarb. āā. ʒ ss. *M.* ft. pill. No. 48. The dose at first is a pill, night and morning, to be increased gradually in a fortnight to four pills, morning, noon and night. The increase occasioned by this and other martial preparations in the red globules of the blood, is often highly conspicuous. "In children especially," says Dr. M'D., "the effect occasionally is almost magical. To those I have often administered iron, with little else but meat and milk diet; when affected with cough, and presenting tubercles in the neck, with tumors perceptible to touch in the mesentery, I have persevered as long as eight or ten weeks without change or abatement; repeatedly interrupted in the time by the occurrence of anorexia or diarrhœa, till at length came the anxiously looked for result, the vermilion lips and the rosy cheek; and in five or six days there would not be a tumor to be found!"

This class of medicines is never admissible during the existence of pain, irritation, or active ulceration of the lungs. It is also contra-indicated where there is irritation or ulceration of the alimentary canal, and where there is either constipation or a dysenteric condition; and as in the latter stages of phthisis one or the other of these states is generally present, we but seldom and only after considerable preparation, have opportunities for the use of these remedies. But such opportunities may sometimes be obtained by resorting to counter-irritation.

Common Salt, the other substance to his remarks upon which Dr. M'Dowell requests the especial attention of his readers, is declared to be of all known medicines the one which most nearly approximates the character and prerequisites of an absolute specific in phthisis. Liebig has observed that "the fattening of an animal is rendered impossible when we add to its food an excess of salt, although short of the quantity required to produce a purgative effect." Dr. M'Dowell infers from this that it is inimical

to the formation of all adventitious animal matters ; and comparatively even more so to albuminous matter than to adipose ; for its most remarkable sorbefacient efficacy is manifested in scurvy, in which when natural albuminous tissues are absorbed so as even to produce large ulcers, the persons afflicted are sometimes observed to remain fat. That scurvy depends upon a change effected by salt in the composition of the blood, has long since, says Dr. M'D., been proved and admitted. But scurvy, whose especial characteristic is the morbid *absorption* of the solids of the body, is the direct opposite of phthisis, which consists essentially in the morbid *deposit* of solids in the tissues of the body.

In scurvy, the degeneration of the blood consists in excess of its globular and saline, and in deficiency of its fibrinous and albuminous constituents.

In phthisis, the degeneration consists in deficiency of globular and saline, and in excess of fibrinous and albuminous constituents.

In scurvy, the lesion of the blood is caused by living too exclusively on salty, nutritious, and stimulating diet ; and is cured by the use of succulent vegetables, acid fruits, &c.

In consumption, the lesion of the blood arises from the use of insufficient and innutritious diet, or from weak digestion. Why should not a change of regimen alter this condition as well as the other ?

To cure consumption, it is necessary that the tuberculous deposits should be removed from the lungs. This can be effected either by absorption and excretion, or by ulceration and expectoration. The former mode is on all accounts to be preferred.

The contingencies which gave rise to scurvy have been known to cure consumption. Thus this disease has frequently been removed by a long sea-voyage, especially where the patient has during the voyage been attacked by scurvy. Some advantage in such cases is doubtless derived from the pure sea air and the exercise of sailing. But the principal benefit accrues from the excitement of the anti-phthisical scorbutic diathesis, and the consequent increased activity of the absorbents, by which the removal of tubercles is accomplished.

The essential cause of scurvy during voyages is the exclusive

or undue employment of provisions containing a large proportion of salt. The same manner of living would produce the same result on land as on sea, and undoubtedly would in either case be equally efficient to cure consumption.

The antagonizing nature of scurvy and phthisis might be inferred from the records of history. Two centuries ago when scurvy was endemic in all the northern parts of Europe, phthisis appears to have been by no means a conspicuous disease. Since that period the improvements in horticulture and domestic economy, with the consequent increased use of succulent vegetables and fresh meat, have almost expelled the scurvy from the catalogue of human afflictions, while consumption on the contrary has become the scourge of mankind, and the cause, in temperate climates, of the death of one-fourth of the whole population.

Such are the reasons by which Dr. M'Dowell has been led to recommend the use of salt and salted provisions in the treatment of phthisis. They are certainly injurious; but in estimating their value, it is important to recollect, that it is exceedingly doubtful whether scurvy has ever been occasioned by the use of salt diet; that numerous facts appear distinctly to disprove such an opinion; and that the blood in that disease, so far from having a morbid excess of red globules, is according to eminent authorities, marked by a deficiency of those globules.

We are willing to be guided in the use of this agent, as in that of the preparations of iron, by the results of experience. If experience prove that the agency of salt is capable of causing the absorption of tuberculous matter from the lungs, we shall thank God for the remedy, and employ it without much caring whether it excites this wholesome change by giving rise to a scorbutic diathesis, or by some other mode not yet explained or imagined. The cases to which Dr. M'Dowell refers in proof of its possessing this power, are, we regret to say it, vague and unsatisfactory.

Besides salt and iron, various other medical agents are recommended in the treatment of phthisis. Among these are all diaphoretics and diuretics which possess tonic without expectorant qualities, such as *taraxacum*, *anthemis nobilis*, *eupatorium perfoliatum*, and *sanguinaria canadensis*. The purpose for which

these remedies are used is to relieve the lungs in the performance of their excretory function by exciting other organs to increased and vicarious activity. Animal food is represented as the most appropriate diet; but its use is to be regulated by the particular character, period, and condition of the case. Iodine the author has found uniformly injurious, except when used by inhalation: employed in this way, it is in some cases strikingly beneficial, in others decidedly prejudicial. Mercurials sometimes relieve the lungs by the revulsive action which they excite in the liver. As external applications, baths, blisters, and friction are found salutary. The habitual and long-continued use of flannel is considered of questionable propriety. Bleeding may sometimes be necessary in acute phthisis occurring in persons of full habit, but should be practised with great caution and only when absolutely demanded. Purging should as much as possible be avoided.

After noticing the treatment of the various affections with which phthisis is occasionally complicated, the volume concludes with a chapter on the prevention of consumption, designed, as the author avows, for the benefit of the public at large, and more especially of that portion of the public in his own section of the country.

We have given more attention to Dr. M'Dowell's work than some of our readers, judging from its suspicious subject and title page, may deem necessary or proper. It is however, not destitute of just claims to consideration; and while we must refuse our assent to many of its peculiar doctrines, and view many of its conclusions as rash and unfounded, we yet recommend it to the profession as worthy of examination. The author has studied his subject with zeal and acuteness, and we trust has been influenced in his publication not more by the *sçavoir vivre* than by regard to the interest of science and humanity. His knowledge and ability rank him with a different class from those benevolent gentlemen who advertise in the newspapers their extraordinary success in curing cancer and consumption by infallible and secret remedies; and his work, whatever its defects, bears little or no resemblance to a volume on the same subject, which has recently appeared in this country from the pen of a *regular mem-*

ber (God help us) of the medical profession, in which the public are affectionately entreated to defend themselves against the danger of consumption by the free use of those admirable *prophylactic pills*, “consisting of

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and carefully prepared at our office.”

Changes of the Blood in Disease. Translated from the French of M. GIBERT, by JOHN H. DIX, M.D., M.M.S.S. 8vo. pp. 59. Philadelphia, 1843.

This treatise of M. Gibert was offered at the *Concours* for the chair of *Pathologie Interne* at the Faculty of Paris, in which the author, M. C. Broussais, and M. Dubois, of Amiens, were unsuccessful competitors with M. Piorry, who was elected.

M. Gibert's dissertation consists of a concise summary of the investigations which the improvements in mechanics and chemistry have enabled the pathologists of the present day to make respecting the healthy and morbid conditions of the blood. An account is first given of the normal constitution of that fluid, as it has been ascertained by the researches, experiments, and successive discoveries of Berzelius, Brande, Vauquelin, Müller and other physicians and chemists contemporary with us. The pathological alterations of the blood as to quantity and quality are next discussed, the author taking up the subject rather as a practical physician than as an experimenter, and considering the changes under the heads of the various diseases in which they are observed. Separate sections are devoted to the state of the fluids in anæmia; the white cachexy; cholera, hemorrhages and scurvy; typhoid fever; febrile diseases from infections, as glanders, phlebitis, and eruptive fevers; arteritis, and diseases of the heart; plethora, and inflammatory diseases in general; acute rheumatism, gout, and gravel; lesions of the urinary, biliary, and respiratory organs, and of the spleen; lesions of the apparatus of innervation, diseases of the skin, and induration of the cellular tissue; and finally, rare and unusual alterations of the blood.

In treating the extensive and obscure subject which he has un-

dertaken, the author attempts to exhibit its principal points, and acknowledges his inability to solve numerous problems which would require for their explanation profound, long-continued, and undivided attention.

The Sanative Influence of Climate. By Sir JAMES CLARK, Bart., M.D., F.R.S., Physician in Ordinary to the Queen, and to the Prince Albert. From the last London Edition. 8vo. pp. 196. Philadelphia, 1843.

This work was first published in London in 1829. The third English edition, of which the present American republication is a copy, was, as we learn from an advertisement prefixed to it, almost entirely re-written, and whatever appeared not directly to the purpose omitted, in order to make room for the consideration of several new subjects, and the introduction of notices of some places not previously described.

The work is divided into two parts. In the *first* the author endeavours to determine the general physical characters of the milder climates of England, and of the south of Europe; to point out the manner in which the climate of different places resorted to by invalids is modified by local circumstances; and to compare those places in relation to their influence on disease.

The *second* part contains an account of the principal diseases which are benefited by a mild climate. This was considered absolutely necessary from the difficulty of otherwise giving precise directions for the application of particular climates to the cure of particular diseases.

In treating of consumption and disorders of the digestive organs, the author has gone more into detail than the nature of his work might at first sight seem to require. But the great importance of these affections, their extreme frequency in England, and the close relation in which they stand to climate considered as a remedy, appeared to claim for them all the consideration which they have received.

The mineral waters of the continent, most suitable to the different diseases treated of, are indicated; and instructions are given respecting the necessary preparation of invalids for a change of

climate, and for their guidance during the journey, and during their residence abroad.

The eminent value of this work of Sir James Clark is well known to the profession. The scientific principles which it advances and illustrates are of great importance, and should be thoroughly understood by practitioners of medicine, not only in Europe, but in every part of the world where there are diseases susceptible of being cured or mitigated by the influence of change of climate.

Essays on the Sources and Mode of Action of Fever. By WM. DAVIDSON, M.D., Senior Physician of the Glasgow Royal Infirmary, &c. &c. and ALFRED HUDSON, M.B., T.C.D., Physician to the Navan Fever Hospital. 8vo. pp. 178. Philadelphia, 1843.

The two essays which compose this volume maintain different and conflicting opinions on several important points connected with their subject, and were originally published separately.

Dr. Davidson's treatise commences with a review of the causes of typhus fever, and the author endeavours to prove that the majority of British writers are correct in believing that the disease is propagated by contagion. With regard to the primordial source of the fever, he offers no speculations, believing the inquiry to be involved in hopeless obscurity. As known at present, typhus fever, he says, is communicated by contagion, and, like all other contagious fevers, by contagion alone.

Various points of analogy between typhus and exanthematous fevers are next considered. These are, 1st, that in typhus, as in those fevers, the contagion can be traced in families, hospitals, schools, &c., and that those exposed to it are very generally infected. 2d, That typhus, like those fevers, affects persons only once during their lives. 3d, That typhus, like those fevers, is characterized by an eruption, which has a rise, progress, and decline, and that the disease cannot be checked *in limine*!

The sources of continued fevers not typhoid, as febricula or simple continued fever, and gastric or intestinal fever, are discussed. The circumstances are pointed out which favour or are supposed to favour the diffusion of continued fevers, and render

them communicable from one person to another. The most prominent of these are, a lumid state of the atmosphere; poverty, famine, or food of bad quality; an accumulation of persons not previously affected; filth and deficient ventilation; weakness of constitution; greater susceptibility of females; depressing passions; and intemperance.

The essay concludes with an attempt to prove the identity of typhus and typhoid fever.

“The strength of our argument,” says the author, “that typhus and typhoid fever are the same diseases modified by place, season, epidemic influence, and perhaps by circumstances not yet ascertained, lies in the fact, that it has been admitted that cases of the latter disease, although rare, have occurred without any morbid appearance being discovered in the intestinal follicles; proving that this morbid condition of these glands is not a necessary anatomical character of the disease. Would it not, therefore, be refining our classification of diseases beyond all precedent, to separate typhus and typhoid fever into two species, when it has been shown that the symptoms in both are the same, or very nearly so; that they have nearly the same laws, as far as these have been ascertained; that the severity of the symptoms in both is not in proportion to the lesions of the intestinal follicles; and that the other complications of both are similar, although various in the same places at different periods, while the only characteristic in dispute has been acknowledged not a constant and therefore not a necessary element for the existence of the disease?”

Mr. Hudson's essay is devoted to the examination of the following questions:—1st. The existence of a special animal poison arising from infection, and producing a specific disease,—typhus. 2d. The generation during the decomposition of organic substances of a poison capable of producing fever when applied to the living body. 3d. The power of this paludal fever to communicate itself from one individual to another; whether it possesses the power of infection *per se*; in other words, whether typhus and typhoid fevers are identical; or whether the paludal

fever acquires the power of infection by the aid of adventitious circumstances, and so becomes communicable by conversion into typhus, or by the super-addition of that disease.

Mr. Hudson is led to adopt an opinion widely different from that of Dr. Davidson.

“The fullest investigation,” he says, “into the differences and analogies of typhus and typhoid fevers, their modes of combination in the same individual, and their occurrence in an intercurrent mode during the same epidemic period, are reconcilable with the theory of two poisons; the one having its elements in the blood, and reproduced in it; the other a product of putrefactive decomposition, and not reproduced in the human body; while on the other hand, Dr. Davidson’s recent essay contains in itself proof that his own theory of a single typhoid poison is not tenable, since it involves the assertion of the identity of two diseases, one of which (according to him) requires to be kept up by an uninterrupted series of cases of contagion, while the other, according to the best observers, never propagates itself by contagion at all!”

Each of these two essays is worthy of examination. They contain a large amount of valuable information and ingenious discussion in relation to a highly interesting and important subject.

A Treatise on the Structure, Economy, and Diseases of the Ear; being the Essay for which the Fothergillian Gold Medal was awarded by the Medical Society of London. By GEORGE PILCHER, late lecturer on Anatomy, and lecturer on Surgery at the Theatre of Anatomy and Medicine, Webb st., Borough; and Senior Surgeon to the Surry Dispensary. First American from the second London edition; with notes. 8vo. pp. 299. Philadelphia, 1843.

This work commences with general observations on the sense of hearing, which are followed by a brief sketch of the developement, in various animals, of the organs inservient to that sense, and by a particular account of the anatomy of the human ear. The physiology of the organ succeeds the description of its structure, and is accompanied by a reference to the gene-

ral doctrines of acoustics. The history of the abnormal condition of the organ, with remarks upon its malformations and injuries, constitutes the concluding and most important part of the essay.

Mr. Pilcher is an experienced, well-informed, and able practitioner, and his treatise on the ear deserves to be ranked among the best works which have appeared upon the interesting, but too generally neglected, department of Surgery to which it relates.

Dissertation on the Diseases of the Maxillary Sinus. Read before the American Society of Dental Surgeons, at their third annual meeting; held in Boston, July 20th, 1842. By CHAPIN A. HARRIS, M.D., D.D.S. Professor of Practical Dentistry, in the Baltimore College of Dental Surgery, &c. &c. &c. Philadelphia, 1843. pp. 165.

The medical profession is again indebted to Professor Harris for a valuable treatise upon certain painful and serious diseases. The maxillary sinus is frequently the seat of morbid affections which it requires great tact to discriminate and great judgment to treat. The author of the treatise under consideration has accumulated whatever information could be obtained upon this interesting subject from the writings of others and has added many interesting cases from his own experience which threw light upon the obscure pathology of the antrum. We regard Dr. Harris' book as an epitome of medical knowledge upon the disorders in question, and as such it ought to be in the hands of every physician and surgeon. The subjects treated of are—inflammation of the lining membrane, purulent condition of the secretions, abscess, ulceration, caries, necrosis, and softening of the bony structures, tumours, exostoses, wounds of the parietes, foreign bodies.

T. E. B.

EPITOME OF
American Medical Journals.

———Like the bee, tolling from every flower
The virtuous sweets, we bring them to the hive.

SHAKESPEARE.

THE NEW ENGLAND QUARTERLY JOURNAL OF MEDICINE AND
SURGERY. No. 4, April, 1843.

ART. I. *Phlebitis, or Inflammation of the Veins.* By Geo. B. Loring, M.D.—The subjects of this paper are, 1st, the constitutional and local symptoms of phlebitis; 2d, the causes of that disease; 3d, its kinds, dependent upon difference of situation; and 4th, its course, termination, and effects.

The *symptoms* of the disease arise, according to Dr. Loring, not, as some authors have supposed, from diffused inflammation acting upon the extensive surface of the lining membrane of the veins, but rather from the introduction of pus into the circulation. Pathological researches show a strong resemblance between the phenomena of phlebitis and those produced by injecting acrid and poisonous fluids into the veins. Whether the phlebitis be traumatic or spontaneous, the symptoms are of a grave typhoidal character, tending to the speedy destruction of life.

Causes.—Among these are enumerated injuries inflicted upon the coats of the veins by external violence, or by wounds, as in amputation, in phlebotomy, in separation of the placenta from the uterus, in wounds of the head and in comminuted fractures; the application of ligatures to a vein, or its division for the cure of varix in the lower extremities; cold long applied to a part, chilblains and gangrene; pressure upon a vein by tumors and other bodies; and injury to the dental and maxillary veins by the ex-

traction of a tooth. The crural phlebitis of women is attributed by Dr. Davis to the pressure of the gravid uterus upon the veins; by Mr. Guthrie its origin is supposed to exist in the uterus; Velpeau ascribes it to inflammation and suppuration of the articulations of the pelvis; Lee to inflammation of the uterine branches of the hypogastric veins. Dr. Loring is of opinion that the frequent occurrence of the disease is from the orifices of the veins in the lining membrane of the uterus being left open after the separation of the placenta, by which a direct communication is established between the cavities of the veins and the atmospheric air, in a manner somewhat analogous to what takes place in amputation and other extensive wounds. In women not in a puerperal state, the disease arises from any cause which disturbs the uterine functions, such as suppressed menstruation and malignant ulceration of the os and cervix uteri. In a patient of Dr. Macann the disease was subsequent to dysentery, and Graves and Stokes have seen it occurring after fever: In these cases, Dr. Lee thinks that the hemorrhoidal veins are the first affected.

“Underneath all the superficial causes,” says Dr. Loring, “which are ordinarily assigned, must lie the great cause, contained in that general *corps du reserve*—constitutional predisposition. The slightest accident coming at the proper time, may give rise to phlebitis,—an accident which, under other circumstances, would scarcely have been recognized by the system.”

The kinds of phlebitis, dependent upon difference of situation. Those mentioned by Dr. L. are uterine phlebitis, phlebitis of the sinuses of the dura mater, of the pulmonary artery* of the upper and lower limbs, of the venæ cavæ, superior and inferior, hepatic phlebitis, renal, splenic, and capillary. The causes and peculiarities of these different kinds of the disease are briefly stated.

The course, termination, and effects of phlebitis.—The effects of this disease are coagulation of the blood, adhesion of the sides of the vessel, and suppuration.

Coagulation produces œdema of the limbs, and a serous effusion into the part by a stoppage of the blood. With the œdema

*Phlebitis occurs in this vessel from its resembling a vein in its blood and internal membrane.

there is a perceptibly hard and very painful cord, instead of the free vein, easily distinguishable from an inflamed lymphatic vessel by the more superficial position of the latter, and by its rose-colour, and knotty appearance on the skin.

Adhesion is a very common result, and, like coagulation of the blood, may happen without any important derangement, unless the extent of the lesion be great, or its situation mortal, as in the sinuses of the dura mater.

Suppuration sometimes occurs in spite of our treatment, and its occurrence is marked by typhoidal symptoms. It may be occasioned by bad treatment, where inflamed parts are irritated, as by tents used to stop hemorrhage, or in attempts to extract foreign bodies when the parts are already in an inflammatory state. Hence the propriety of Cruveilhier's rule, that we should never touch a wound when it is under the influence of violent inflammation. Besides the excessive pain thereby produced, there is danger of converting the adhesive into the suppurative inflammation, and in this transformation the veins are liable to participate with the other tissues.

A frequent termination of phlebitis, whether idiopathic or traumatic, is in abscess of the lungs, liver and other organs. The cause of this metastatic abscess, which has been seen in all ages to occur so frequently after great surgical operations, destroying patients when to all appearance the wound was doing well, has given rise to much contention and many ingenious experiments. By these it has been proved, that pus in circulation with the blood may be arrested in different departments of the capillary system; that it is arrested most frequently in the lungs, then in the liver and kidney; that wherever arrested, its tendency is to excite capillary phlebitis, or circumscribed inflammation, which runs on more or less rapidly to the production of abscess; and this effect may take place successively in many parts of the body.

Treatment.—Where it occurs from venesection, leeches should be applied along the course of the inflamed vessel, repeatedly and in large numbers if the severity of the case demand it. The arm should be covered with an emollient or saturnine poultice, or an

evaporating lotion; and diaphoretics, saline purgatives, and the antiphlogistic regimen should be employed.

General bleeding is in some cases extremely useful. Where its propriety is doubtful, we may resort with great advantage to tartrate of antimony.

Where phlebitis has reached the suppurative stage, theory seems to indicate the employment of stimulants and tonics, repeated vesicatories, and above all calomel. Evacuation of the bowels appears to be more useful than any other mode of treatment. Cruveilhier declares that when suppuration is once established, and pus has once entered the circulation, medicine is generally powerless. Velpeau succeeded in one case by mercurial friction, when other remedies had been used in vain.

In traumatic phlebitis, the disease is generally so rapid, and the constitution so shocked, that we have mostly but little time for treatment, and can effect but little by it when we have time.

ART. II. *Case of Natural Labor succeeded by violent after-pain and mania.* By Edward Warren, M.D.—The patient, a few weeks after her confinement, went to hear an infidel preacher, and four days subsequently attempted to commit suicide by throwing herself into the water. On being rescued, she was perfectly aware of what she had done, and could answer rationally all questions that were asked her. Dr. W. inquires whether she should be considered as insane. The intention to commit suicide is of itself, he thinks, no evidence of insanity. But if a person in full possession of mental power, is nevertheless impelled by an impulse, which he has not sufficient moral power to resist, to commit crime without a motive; to injure himself or to injure others; or to destroy their property or his own; he may safely be pronounced insane, and be subjected to civil restraint. The man who devotes himself to the habitual use of intoxicating liquors, is a specimen of this kind of insanity. He who has from infancy suffered himself to be guided by a strong passion, is another specimen. Each of them labors under what Esquirol has justly termed *moral insanity*, and it would be well if public provision were made for the confinement of such persons.

The patient in the present case was sent by her friends to the hospital at Worcester.

ART. III. *On some of the circumstances which determine the food of man.* By Augustus A. Gould, M.D., Boston. Read before the Boston Society for Medical Improvement.—The author comes to the common and rational conclusion, that although man may subsist without animal food, and under certain circumstances can live best without it, yet that it is evident that his organization provides that he may be omnivorous: his adaptation to procure all kinds of food allows him to be so, and his capability of inhabiting all climates requires him to be so. The proportion of animal and vegetable food best for him may be calculated on the general principle of his distance from the equator, combining, in the calculation of individual cases, temperament and occupation.

ART. IV. *Have Variola, Varioloid and Varicella a common origin? A few considerations and cases bearing upon this question.* By Wm. Edward Coale, M.D.—In the arguments of Rayer and others in favor of the identity of these three forms of disease, Dr. C. thinks that there is a defect in the evidence. In no instance is it clearly and indubitably shown that but one contagion was at work. He relates a number of cases which occurred on the U. S. frigate Columbia, to which he was attached as one of the assistant surgeons, and which supply, as he thinks, “this defect in the evidence upon the identity side.” The cases occurred in a period of little more than six months, during which the ship visited the following ports: Muscat, Oct. 17th, 1838—Bombay, Nov. 1st—Goa, Nov. 14th—Columbo, Nov. 24th—Coast of Sumatra, Dec. 21st—Pulo Penang, Jan. 25th, 1839—Singapore, Feb. 3d.

“At none of these places, after the most diligent inquiries, could we hear of any variolous disease prevailing; and our means for obtaining information upon this point were very ample, both from the constituted authorities, and from personal acquaintances among the faculty, many of whom came to visit our patients.—At all these ports the ship lay more than a mile, and at many, more than two miles from the shore, and the men were not permitted to visit the shore, except the gig’s crew, of whom one only was attacked.

“Then the question comes, what was the disease? In the three first cases, in that of W. G., and in the two last, marking the commencement, the middle, and the end of the period of six months, the disease was entirely vesicular, and answered to all the symptoms given as those of chickenpox. The remainder of the cases, with the exception of the three fatal ones, and those of W. V. and J. M., correspond to the descriptions given of varioloid, in the irregularity of the phases, and the slightness of the symptoms after the first day or two. The five exceptions, are the only cases in which it appears to me there can be a doubt as to the name of the disease. Were they merely cases of aggravated varioloid, or of genuine small pox? If of the former, what are the characteristic distinctions of the latter? All of those laid down by the most approved authors seem to have been present—the suddenness, the violence of the attack, the simultaneous appearance of the pustules in all parts of the body not in successive crops, the accompanying tumefaction, and the secondary fever.”

ART. V. *The Contagiousness of Puerperal Fever. Read before the Boston Society for Medical Improvement. By Oliver W. Holmes, M.D., and published by request of the Society.*—A valuable essay, the peculiar doctrines of which are thus summed up by the author.

“There may be some among those whom I address, who are disposed to ask the question, what course are we to follow in relation to this matter? The facts are before them, and the answer must be left to their own judgment and conscience. If any should care to know my own conclusions, they are the following; and in taking the liberty to state them very freely and broadly, I would ask the inquirer to examine them as freely in the light of the evidence which has been laid before him.

“1. A physician holding himself in readiness to attend cases of midwifery, should never take any active part in the post-mortem examination of cases of puerperal fever.

“2. If a physician is present at such autopsies, he should use thorough ablution, change every article of dress, and allow twenty-four hours or more to elapse before attending to any case of mid-

wifery. It may be well to extend the same caution to cases of simple peritonitis.

"3. Similar precautions should be taken after the autopsy or surgical treatment of cases of erysipelas, if the physician is obliged to unite such offices with his obstetrical duties, which is in the highest degree inexpedient.

"4. On the occurrence of a single case of puerperal fever in his practice, the physician is bound to consider the next female he attends in labor, unless some weeks, at least, have elapsed, as in danger of being infected by him, and it is his duty to take every precaution to diminish her risk of disease and death.

"5. If within a short period two cases of puerperal fever happen close to each other, in the practice of the same physician, the disease not existing or prevailing in the neighborhood, he would do wisely to relinquish his obstetrical practice for at least one month, and endeavor to free himself by every available means from any noxious influence he may carry about with him.

"6. The occurrence of three or more closely connected cases, in the practice of one individual, no others existing in the neighborhood, and no other sufficient cause being alleged for the coincidence, is *prima facie* evidence that he is the vehicle of contagion.

"7. It is the duty of the physician to take every precaution that the disease shall not be introduced by nurses or other assistants, by making proper inquiries concerning them, and giving timely warning of every suspected source of danger.

"8. Whatever indulgence may be granted to those who have heretofore been the ignorant causes of so much misery, the time has come when the existence of a *private pestilence* in the sphere of a single physician should be looked upon not as a misfortune but a crime; and in the knowledge of such occurrences, the duties of the practitioner to his profession, should give way to his paramount obligations to society."

ART. VI. *Aneurism of the Aorta—fatal.* By Dr. J. C. Dalton, of Lowell.—Two cases. In the first of them, an ulceration about the size of a sixpence had perforated the walls of the aorta, one inch below the going off of the arteria innominata. Blood

was injected into the cavity of the pericardium, and the patient's life instantly destroyed. There was no aneurismal sack in this case; and such a sack is never found in this portion of the aorta, in consequence of this part of the vessel being strengthened by a fold of the pericardium and therefore left without an external or cellular coat. The pericardium ascends on the great vessels as high as the commencement of the arch of the aorta, and opposite to the second ribs. In the extent thus covered aneurismal enlargement never occurs. Perforating ulceration, as in the present case, is mentioned by Bertin as of very rare occurrence.

In the second case, a sack in the walls of the aorta of the size of a lemon, commencing an inch below the subclavian, bursted into the left bronchus, and the patient died ejecting a torrent of blood from her mouth.

ART. VII. *Cases illustrating the Diagnosis of Acute Diseases of the Heart in Children.* Read before the Boston Society for Medical Improvement. By John Ware, M.D.—From the general difficulty of detecting disease by physical signs, which renders that mode of investigation impracticable in the case of a large proportion of practitioners in this country, and from the peculiar difficulty of ascertaining in this manner the diseases of children, especially where the heart is affected, Dr. Ware justly infers that every thing which can render more exact our knowledge of the rational signs is worthy of record. After relating four cases of thoracic affections in infants, he subjoins the following remarks:

“In comparing these cases, it is obvious to remark in the first place, that the great amount of disease in the two first prevents us from attributing the urgent symptoms and the fatality of them wholly to the pericarditis. An amount of similar disease on both sides of the chest, probably always proves fatal without any such complication. But the symptoms in these cases, in which they differed from common cases of very severe and even fatal pleuropneumonia, were the paleness of the face and lips, the smallness and feebleness of the pulse, as well as their great frequency, and the “mortal anguish” which accompanied and was produced by the breathing, although at the same time the patient was comparatively still and tranquil. The same symptoms were also present

in the third case; and though this was an affection of the heart of a different character from either of the former, still so far as these particular symptoms are concerned, this does not diminish the probability that they may be regarded as indicative of some affection of the heart which interferes with its function as a muscular organ, since this function is very likely to be impaired by a disease which attacks its surface only. I consider the fact, indeed, that the same symptoms have been thus found connected with different affections of the heart, in some cases with and in some without, concomitant disease of the lungs, as confirming the opinion that they are to be regarded as proceeding from the state of action of the heart.

“The fourth case differed from the two first in the less amount of disease of the lungs, whilst its intensity in the pericardium was greater—or rather probably the condition of the lungs permitted life to continue longer, and thus the disease in the pericardium was suffered to run on to a later stage. In this case there was the same great frequency and feebleness of the pulse—the rapidity and anguish of respiration—with at the same time a stillness and tranquillity—but with quite a different state of the capillary circulation of the face, lips and hands. This state of the capillary circulation, however, although differing from that presented in the former cases, is also not less different from what we usually meet in simple pulmonary disease, and is therefore to be noted as one circumstance tending to illustrate the history of the class of cases to which it belongs.”

ART. VIII. *Operations for Fissure of the soft and hard Palate (Palato-plastie.)* By J. Mason Warren, M.D.—After stating Malgaigne’s division of the congenital fissures of the palate into the three forms of, 1st, *The simple fissure*, where the soft palate is divided in the median line, without any loss of substance, and without any division of the palatine vault; 2d, *The partial division* of the hard parts, whether affecting the ossa palati alone, or extending in part into the maxillary bones; and 3d, *The complete division* of the boney palate, in which there is a greater or less separation of the two halves of the palatine vault, and almost always a double fissure of the lip and of the alveolar processes;

Dr. Warren proceeds to offer an account of the operations which have been proposed for their relief. He notices the operation of staphaloraphy, or suture of the soft palate, as performed by Roux, Graeffe, and Dr. Warren of Boston. This was limited to remedying fissures of the soft palate alone, rejecting by far the most numerous class of cases of this malformation, viz., those in which the jaws and hard palate are implicated. Roux has recently carried into practice an operation on the soft palate where the above named complications existed, which in attempting to perform it, Dr. Warren found to be useless, except where the palatine bones were only slightly separated. In his attempt, however, certain modifications were suggested to him, which he has since been fortunate enough to put into successful practice. The method which he employs is fully and minutely detailed, but the description, too long to be inserted entire, would be unintelligible if abridged. It deserves to be carefully examined by all who study the means of relieving the common and distressing deformity to which it refers. The author states, that if it does not always succeed in completely closing the fissures of both the soft and hard palate, it more frequently results in the closure of the former than the one recommended by Roux, and in some instances entirely obliterates the whole extent of the aperture both in the bones and soft parts. Since his first operation, he has had occasion to repeat it in thirteen different cases, which, with one exception, have terminated successfully, either in the closure of the whole fissure of both hard and soft palate, or so far that the aperture which remained in the bones could be easily closed by an obturator fitted to the adjoining teeth.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. 28, Nos. 4, 5, 6, 7, 8, March, 1843.

Taliacotian Operation. By J. Mason Warren, M.D.—The patient was a lady, 30 years of age, who had lost a portion of her nose by the improper use of a caustic applied to remove a

warty excrescence. It would have required too great a sacrifice to bring the integuments from the forehead, and it was therefore determined to adopt the Italian method of transplanting the skin from another part of the body. The patient was advised to have a bandage made such as is described and depicted in the work of Taliacotius, and to exercise herself daily for a few weeks in keeping the arm up in contact with the face in the position which it would be requisite to maintain after the operation. This being done, and all preparations being made, the operation was performed. The cicatrix covering the edge of the nostrils was first removed, and the apex of the septum and columna nasi made into a raw surface. A flap, nearly double the size required, was now dissected from over the upper part of the biceps muscle of the right arm, its base, which presented downwards, being left attached. The bleeding having ceased, and the flap contracted, which it did nearly one half, the arm was brought up to the face; and the edges of the flap confined in contact with the raw surface of the nose by six sutures. The bandage of Taliacotius was next applied, and served to maintain the arm immoveably fixed in contact with the head. For an hour or two, the arm was quite numb, from its constrained position and the pressure of the bandages; this gradually changed to a painful sensation. Her pulse, however, was good; she slept at intervals, took gruel with appetite, and walked about the room without disturbing the bandages. The pain when severe was relieved by wetting the bandages with laudanum.

The operation was performed on the 21st of October, 1840.— On the 24th, 72 hours after, the pedicle was divided, and the arm released from its painful position. On first letting it down, it appeared quite paralyzed, but by gentle friction the power of motion and sensation was gradually restored. A perfect adhesion had taken place between the flap and the right side of the nose. On the other side, the skin was so wrinkled up from the pressure of the head on the arm, that it was not possible to determine what was the state of union. Out of the flap a pedicle was now shaped to serve for the completion of the columna, and was confined in contact with what remained of the old one by a single suture.

December 12th. The nose was entirely healed ; its form was good, the tip slightly turned up, and the whole organ a little shortened when compared with its original dimensions, but still agreeable, and presenting nothing remarkable to a casual observer. Two years have since elapsed, and no unfavourable change has occurred in the aspect of the restored organ.

“This case,” says Dr. W., “is interesting from its being, so far as we know, the only one which has been successfully performed by this method for the last twenty years; and from the separation of the flap being made at an earlier period than in any case on record. In two other cases published in this Journal, where the whole nose was lost, the skin requisite for its restoration was taken from the forehead, according to the Indian method. In a third case, where a portion only of the organ was destroyed, the skin was borrowed from the *fore-arm* near the wrist. This mode was found objectionable, from the impossibility of retaining the arm sufficiently steady, by any apparatus that could be devised, to prevent the movements of the body from being communicated to the part where the uniting process was going on.—By the method of Taliacotius adopted in the present case, the head and arm are kept immoveably confined during the time of union, and no motion of the patient can disturb these parts, if the bandage remain firm. This position may easily be supported by a thin subject; but in a large muscular man, it is next to impossible even to bring the arm into the proper position, much less to preserve it there any length of time.”

Excision of Tonsils. By Josiah Crosby, of Meredith Bridge, N. H.—A case of alarming hemorrhage occurring the day after the removal of the tonsils, which had been very much enlarged and highly inflamed. It was suppressed by common astringent gargles, but returned about the same time the next evening, and was not checked until lunar caustic was applied over the whole cut surface of both tonsils. On the following evening it returned with great violence, but was immediately and permanently stopped by the application of hot iron to both tonsils. The strong hemorrhagic nîsus of the constitution in this case was evinced by

the occurrence of a profuse epistaxis, the day after the last bleeding from the tonsils.

Though it may generally be safe to remove tonsils however actively inflamed, it is occasionally very dangerous; and where there is a strong constitutional tendency to hemorrhage, Dr. C. is of opinion that the caustic should be preferred to the knife.

Nos. 9, 10, 11, 12, April.

New method of treating Hernia. By Y. of Boston.—An anonymous communication, stating, that Professor Janes of St. Louis has invented a new mode of treating hernia for the purpose of effecting a radical cure. His method consists of an operation which is simple, not difficult of performance, and attended with but little pain. It is added that he has patented his instrument, and of course his manner of using it. If this be true, the Professor has certainly lost by his invention more than he can possibly gain.

Obliteration of the Saphena Major Vein. By Joseph H. Flint, M.D.—The operation consisted in passing a pin, necessarily a long one, underneath the vein in the thigh, about three inches above the knee. A ligature of moderate size was louped around the pin with a single knot, and drawn sufficiently tight to interrupt the circulation. A large surgeon's needle was then passed through the vein inclosed in the loup, to wound its internal coat, and when withdrawn the operation was completed by the hare-lip suture. Another pin was in the same manner passed under the vein, two inches below the knee. The ligatures should not be drawn so tight as to endanger sloughing, nor the pins suffered to remain so long as to produce ulceration. In the case detailed, the upper pin was drawn on the fifth day, and the lower one on the sixth.

Quinine in Intermittent and Remittent Fevers. By S. S. Ransom, M.D., of Burlington, Iowa.—The use of this agent is recommended at any stage of the disease, without regard to intermission, remission, or exacerbation. A remittent under its use very soon becomes intermittent. In a case of bilious remittent fever, after the bowels have been thoroughly evacuated with a

mercurial cathartic, Dr. R. commences giving one grain of sulph. quiniæ every hour, and finds it rarely necessary to continue this longer than thirty-six hours before there is a perfect intermission. The frequent pulse, dry tongue, hot and dry skin, thirst, and pain in the head and back, all vanish when the system has been kept under the use of quinine for a few hours,

AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

New Series, No. 10, April, 1843.

ART. I. *External Iliac Aneurism successfully treated by ligature to the Common Iliac Artery.* By Edward Pearce, M.D., one of the Surgeons of the Pennsylvania Hospital.—The primitive iliac artery has been tied in the living subject twelve times. In five of the cases the operation was successful. In three cases, not aneurismal, one was attended with success. In nine cases of aneurism, four were cured. After a careful analysis of all the cases, Dr. Pearce has adopted the principle, that in a case of aneurism of the external iliac artery in its early stage, and where we are not obliged to cut the peritoneum, the application of a ligature to the common iliac is not a very dangerous operation.

ART. II. *On the Active Principle of Malaria.* By Daniel P. Gardner, M.D., Professor of Chemistry, &c. in Hampden Sidney College, Va.—The author has adduced many important facts, under a series of propositions, to show the nature of the active principle of malaria. His propositions are as follows:—

1. Sulphuretted hydrogen gas exists in the stagnant waters, and atmosphere of certain marshes.
2. The character of malarious regions is similar to that of those in which sulphuretted hydrogen is generated.
3. Certain agents have been supposed to give activity to the exhalations arising from marshes, called malaria.
4. The properties of malaria are fully recognised by the profession.

5. Sulphuretted hydrogen is the active agent in the production of those forms of malarious fever met with on the sea-coast, and the diseases belonging to the same class found inland.

ART. III. *Excision of the Olecranon Process for Anchylosis of the Elbow-joint.* By Gurdon Buck, Jr., M.D., one of the Surgeons of the New York Hospital.—The numerous successful operations for the excision of the entire elbow-joint, and his own previous experience in one case, induced Dr. Buck to attempt this operation for the removal of only a small portion of the joint. At the expiration of three weeks, the patient walked about the ward with his arm in a sling. The wound was healed with the exception of an opening in the middle, from which a slight discharge continued. Efforts to restore the motion of the joint were persevered in for three weeks longer. At length, owing to the severe pain caused by every attempt at motion, it was necessary to desist and to allow the joint to ankylose in a position of the limb most favorable for its use.

ART. IV. *Electro-Magnetism in a case of Poisoning—with suggestions for its application to still-born children, and to some forms of disease.* By Thomas S. Page, M.D., of Valparaiso.—The poisoning in this case was caused by taking, for the cure of gleet, half an ounce of a powder, represented by the apothecary from whom it was procured, to be pulverized cubebs. It was swallowed by the patient at midnight. From 12 o'clock next morning until 4 P. M., he was in a most alarming condition. Nothing seemed capable of arousing him. His exhaustion was extreme. The application of an electro-magnetic battery happily produced re-action and saved the unfortunate man.

ART. V. *Analysis of a substance represented to be Pulverized Cubebs.* By William Procter, Jr.—A portion of the powder, which poisoned the young man whose case is related by Dr. Page in the preceding article, was transmitted to Mr. Procter, of Philadelphia, for analysis. The following is a summary of the substances which Mr. P. reports it to have contained:—

In 100 parts.	
Cubebin or piperin,	2.25
Morphia, - -	2.50
Meconic acid, -	1.25
Narcotine,	} Proportions not ascertained.
Narceia,	
Volatile oil and resin,	
Extractive and gum,	
Chloride of sodium,	
Lignin,	

“As the object of this analysis is to ascertain the nature and properties of the deleterious agent associated with the cubebs, only those parts of the investigation have been given in detail, which, by proving the presence of morphia and meconic acid in the powder, render the existence of opium in it evident. That other principles, as codeia, meconin, etc. were also contained in it, there cannot be a doubt, but search for them would be as hopeless as it is useless. In conclusion, it may be observed that the quantities of morphia and meconic acid indicate the presence of about 30 per cent. of opium in the powder, equal to 75 grains in the dose taken by the patient, and doubtless sufficient to have occasioned death.”

It does not appear from Dr. Page's relation of the case, that the patient vomited before the medical treatment was applied.—The opium must therefore, according to Dr. Page, have been in the stomach 12 hours, before he administered the sulphate of zinc, which brought up “a small quantity of the powder apparently.” Now, who can believe that a man may have 75 grains of opium in his stomach twelve hours and not die? Has not an error been made in Mr. Procter's analysis?

ART. VI. *Disease of the Heart. Hypertrophy and dilatation of the Auricles and right Ventricle; hypertrophy of the left Ventricle; cartilaginous thickening of the Mitral Valve; contraction of the chordæ tendineæ connected with it; permanent patescence and regurgitation through the left auriculo-ventricular orifice; thickening of the tricuspid valve; Endo-pericarditis; Pulmonary Apoplexy. Death. Autopsy. With remarks. By C. W. Pen-*

nock, M.D., Attending Physician of the Philadelphia Hospital, Blockley.

ART. VII. *On the use of the Liquor of Hydriodate of Arsenic and Mercury in Cutaneous and Uterine Affections.* By Isaac E. Taylor, M.D., of New York.—In volume 16th of the Dublin Medical Journal, Mr. Donovan recommends a new chemical combination entitled “Liquor Hydriodatis Arsenici et Hydrargyri.” In the last eighteen months Dr. Taylor has prescribed it in a number of cutaneous diseases, and he now testifies that it causes a more marked and prompt effect than the remedies usually resorted to in Lupus, Rupia, Psoriasis, Secondary Venereal, &c. Mr. Donovan’s formula for the Liquor is given by the editor of the American Journal, at the conclusion of Dr. Taylor’s communication:—

“Triturate 6.08 grains of finely levigated metallic arsenic, 15.38 grains of mercury, and 50 grains of iodine, with one drachm measure of alcohol, until the mass becomes dry, and from being deep brown has become pale red. Pour on eight ounces of distilled water; and after trituration for a few moments, transfer the whole to a flask; add half a drachm of hydriodic acid, prepared by the acidification of two grains of iodine, and boil for a few moments. Where the solution is cold, if there be any deficiency of the original eight ounces, make it up exactly to that measure with distilled water. Finally filter.

“His theory of this process is the following. By the long continued trituration of arsenic, mercury, iodine and alcohol, the metals are converted into iodides, which combine. The mass by solution in water is converted into an hydriodate of arsenic and mercury. The quantities of the two metals are so adjusted, that, when converted into protoxides by decomposition of a portion of the water in which they are dissolved, there will be eight grains of protoxide of arsenic, and sixteen of protoxide of mercury.—The quantity of water is such that each drachm measure of the solution will contain exactly one-eighth of a grain of protoxide of arsenic, and one-fourth of a grain of protoxide of mercury.—Mr. Donovan conceives that the quantity of mercury ought to be double that of the arsenic, in order to insure a slow and moder-

ate, yet adequate mercurial action along with the proper effect of the arsenic.

“Of this liquor hydriodatis arsenici et hydrargyri, each drachm measure consists of:—

“Water, one drachm.

“Protoxide of arsenic, one-eighth of a grain.

“Protoxide of mercury, one-fourth of a grain.

“Iodine (converted into hydriodic acid) four-fifths of a grain.

“The colour of this solution Mr. D. states is yellow, with a pale tinge of green: its taste is slightly styptic. It cannot be properly conjoined with tincture of opium, or with sulphate, muriate, or acetate of morphia; for all these produce immediate and copious precipitates in it. Hence if opiates are to be used during the exhibition of this arsenico-mercurial liquor they must be taken at different periods of the day. Tincture of ginger produces no bad effect.

“Mr. Donovan recommends the following formula: **R.**—Liquoris Hydriodatis arsenici et hydrarg. drachmas duas; aquæ distillatæ uncias tres cum semisse; Syrupi Zingiberis semunciam. Misce—Divide in haustus quatuor. Sumatur unus mane nocteque.

“Thus one-sixteenth of a grain of protoxide of arsenic, and one-fourth of a grain of protoxide of mercury would be taken in each dose, along with two-fifths of a grain of iodine, which being in a state of combined hydriodic acid, will be much diminished in energy of medical effect. This is according to Mr. D. the proper dose to begin the exhibition of arsenic with, but it will very soon be necessary, he says, to increase it.

“The division into draughts is necessary; first to insure accuracy of the dose, so essential in the case of this active medicine; and next to prevent injury to the ingredients by the use of a metallic spoon as a measure.”

Mr. Donovan thinks that the liquor will be tolerated in larger doses than Dr. Taylor deems it prudent to use. Mr. D. recommends a dose of half a drachm, which contains $\frac{1}{16}$ th of a grain of arsenious acid, $\frac{1}{8}$ th of a grain of peroxide of mercury, and $\frac{2}{5}$ ths of a grain of iodine, in a state of hydriodic acid. Some of the phy-

sicians of Dublin have given one drachm three times a day, without any unfavorable effects. Dr. Taylor, however, has never given more than *five drops*, at a dose, which contains $\frac{1}{20}$ th of arsenious acid, $\frac{1}{4}$ th of peroxide of mercury, and $\frac{1}{30}$ of iodic acid.

ART. VIII. *Obstetrical Cases and Observations.* By Isaac G. Porter, M.D., of New London.—The first case recorded by Dr. P. is one in which it was doubtful during a period of four months prior to the occurrence of labor, whether the patient, who was a married lady, was pregnant. The mammæ were not enlarged, the areolæ were not formed, the glandular follicles around the nipples were of the ordinary size, there was no unusual nausea or salivation, and but little enlargement of the abdomen. The neck of the uterus remained, moreover, entirely undeveloped, within one week of parturition. Notwithstanding numerous examinations of the abdomen were made, it was not until 6 days before labor, that Dr. P. detected fetal motion. Auscultation, and the trial of the urine for kiesteine were not resorted to.

The second case is an instance of the probable salvation of the life of a child, by dividing the umbilical cord immediately after the birth of its head and before the expulsion of the body. The cord encircled the neck so closely that there was danger, not only of the circulation being arrested, but of all communication between the child's lungs and the external air being cut off.

The third is an interesting case of anterior obliquity of the uterus during parturition. The head of the child was pressing through the lower strait, but on making an examination per vaginam Dr. P. could find no os tincæ, until after repeated efforts.—By directing the force between the perineum and the uterus, far up towards the sacrum, he felt the unexpanded os uteri; and by gently insinuating the point of the finger it was made gradually to yield. Efforts were then made to draw it towards the pubis, the axes of the uterus and the pelvis became coincident, and the labor was happily terminated.

The last is a case of difficult parturition. The difficulty was occasioned by an immense tumor on the posterior aspect of the sacrum of the child. The child's pelvis was locked in that of its mother, after the birth of the head, shoulders, and knees.—

The child was disengaged with the exertion of all the physician's force.

ART. IX. *Communication of Pulmonary Air Vesicles by a direct route with the Pulmonary Veins.* By W. E. Horner, M.D., Professor of Anatomy in the University of Pa.—Several experiments made by Professor Horner demonstrate, that if a column of water be gently let into the trachea of a subject with sound lungs, the left side of the heart will become gradually filled with water. From this fact he concludes, that there is a direct communication between the air vesicles and the pulmonary blood-vessels, especially the veins. Prof. H. proposes to make more experiments; and he hopes, that, in the mean time the same subject will receive the attention of others.

ART. X. *Surgical Cases.* By George Fox, M.D., one of the Surgeons to Wills Hospital.—One of these cases is a cure of false aneurism of the anterior tibial artery, by a ligature applied on the femoral artery.

ART. XI. *Observations on the Pulse and Respiration.* By John M. B. Harden, of Liberty County, Georgia.—The observations were made by Dr. H. on his own person, in a state of health, in the three postures, lying, sitting and standing, and while under the influence of various excitants.

ART. XII. *On the Curability of Insanity.* By Pliny Earle, M.D. From p. 344 to p. 363.—This paper contains much valuable information, collected apparently with great care by Dr. Earle. Most of the facts set forth by him have reference to the influence of the age and sex of the patient, the type and duration of the disease, the season and the plan of medication, in modifying the results of treatment. There are now twenty public asylums for the insane in the United States. These are arranged by Dr. Earle in the subjoined table according to the time at which they were opened for the reception of patients.

Asylums.	Where situated.	Opened.	Beds.	Farm.
State Lunatic Hospital.....	Williamsburg, Virginia	1773	130	20 acres
Friends'.....	Frankford, Pa.....	1817	65	65 —
McLean.....	Charlestown, Mass....	1818	140	30 —
Bloomington.....	Near New-York City..	1821	140	50 —
Retreat.....	Hartford, Conn.....	1824	100	17 —
Kentucky State Hospital...	Lexington.....	1825	130	18 —
South Carolina.....do....	Columbia.....	1827	100	34 —
Western.....do....	Staunton, Virginia....	1828	140	65 —
Massachusetts.....do....	Worcester.....	1833	232	80 —
Georgia.....do....	Milledgeville.....			
Vermont.....do....	Brattleborough.....	1836	130	50 —
Ohio.....do....	Columbus.....	1838	140	57 —
New-York City.....do....	Blackwell's Island....	1839	300	
Boston.....do....	South Boston, Mass....	1839	100	4 —
Maryland State.....do....	Baltimore.....	1839	150	10 —
Tennessee.....do....	Nashville.....	1840		
Maine.....do....	Augusta.....	1840	120	70 —
Pennsylvania Hospital.....	Near Philadelphia....	1841	230	101 —
New-Hampshire State, do.	Concord.....	1842		
New-York.....do....do.	Utica.....	1843	300	

"In Rhode Island the late Nicholas Brown, Esq., left a legacy of thirty thousand dollars to be devoted to the establishment of a lunatic asylum; but as yet there has been no definite action towards the erection of a building. In Connecticut and New Jersey the subject of a State Asylum has been agitated, and in his message for last year, the governor of the latter state urged upon the Legislature the importance of such an institution. In Pennsylvania, a State Asylum has been commenced near Gray's Ferry, in the vicinity of Philadelphia, but the work is now suspended. Of the twenty-six states composing the Union, there are still fourteen in which there is no hospital exclusively devoted to the treatment of the insane. The deficiency is glaring, and we trust will soon awaken the interest and energies of those by whom it may be supplied.

"The cities of Philadelphia, Baltimore, Washington, and perhaps some others have departments for the insane paupers in their respective alms-houses. A building connected with the Charity Hospital in New Orleans is also appropriated to lunatics. There are several private institutions in different sections of the country, of which that of Drs. G. and S. White, in Hudson, N. Y., is the largest, and one of the most ably conducted."

There is an excellent article on Insanity in Massachusetts in the North American Review, for January, 1843.

ART. XIII. *Luxation of the Patella on its Axis.* By Joseph P. Gazzam, M.D., of Pittsburg, Pa.—The patient was a son of Judge Porter, of Pittsburg, aged 21 years.

The patella of the right leg was dislocated on its axis, i. e. it was lying on its edge—presenting the posterior face outward, and the anterior face inward—the inner edge resting in the groove between the condyles of the femur. After repeated unsuccessful attempts at reduction, it was determined to lessen the tension of the joint by dividing the ligament of the patella. This was done by introducing beneath the skin a narrow-bladed knife, and cutting the ligament close to the tubercle of the tibia. Reduction was again attempted, but in vain. The patella could be moved on its edge more freely than before the cutting, but resisted all our efforts to replace it. The patient was next placed erect, a vein opened, and the blood allowed to flow until the approach of syncope, when the efforts at reduction were renewed—but although the patella could be moved on its edge, it could not be lifted out of the groove in which it rested. It was now agreed to let the patient rest for a few hours.

The next day it was proposed to adopt with some modification the plan of Dr. John Watson, of New York, as detailed in the *N. Y. Journ. of Med. and Surg.* No. 2, and republished in the *Am. Jour. of Med. Sciences*, vol. 25, p. 252.

The thigh was strongly flexed on the pelvis and the heel elevated. Then the leg was flexed steadily and forcibly on the thigh and suddenly straightened. At the moment of straightening the leg, Dr. Gazzam pressed very strongly against the lower edge of the patella from without, with the head of a door key well wrapped, while Dr. Addison pressed with both thumbs against the upper edge of the bone towards the external condyle. On the fourth trial this manœuvre succeeded, the bone springing into its place with a snap. A cushioned splint was placed behind the knee and secured by a bandage—an evaporating lotion was used, and the patient kept at rest. Recovery was uninterrupted, and the young man has now perfect command of the limb.

ART. XIV. *Case of Salaam Convulsion, with Remarks.* By Ezra P. Bennett, M.D., of Danbury, Conn.—Counter-irritation,

Dr. B. is satisfied, was the principal agent in subduing the disease in the case which he relates. The patient was his own twin son, six years old. He gives the particulars of two attacks of the disease; and remarks, that if in the second attack he had blistered the upper instead of the lower portion of the spine, as he did in the first attack, he thinks the recovery would have taken place earlier than it did.

ART. XV. *Case of Medullary Sarcoma of the Labia, and other cases of Malignant Disease with Remarks.* By A. B. Shipman, M.D., of Cortlandville, New York.—A lady 39 years of age discovered a tumor not larger than a chestnut on her right *labium pudendi*. After three years it was increased to the size of a large cocoa-nut of a pyramidal shape, and resembled in shape an enlarged testis of a knotty, uneven surface, very hard and heavy. The occurrence of pregnancy appeared to cause a rapid development of the tumor; for, previously, it had remained nearly stationary for more than three years. The patient implored Dr. Shipman to remove the tumor by an operation. This was done. The wound healed in a few days. She, subsequently, gave birth to a dead fœtus in the seventh month of gestation. Two weeks after the labor, tumors sprung up from all the lower part of the abdomen in large irregular masses attended with acute pain and high constitutional excitement. The most prominent parts of two or three of the tumors burst, and a fungus shot forth attended with hemorrhage, and a sanious discharge having an intolerable odor. Worn out with pain, sleepless nights and wretched days she died in about 10 weeks after the labor. Previous to the operation the diagnostic marks in this case were not as clear as in most cases of fungus hæmatodes. The tumor was hard, solid, unyielding, like scirrhus, and the pains were sharp and lancinating.

ART. XVI. *Incontinence of Urine, successfully treated by Nitrate of Potash.* By J. Young, M.D., of Chester, Delaware County. In six cases of eneuresis in adults, four females and two males, Dr. Young, has prescribed with success ten grains of pulverized nitre, every three or four hours, in flaxseed tea. The cases all yielded within 24 hours after commencing the treatment.

THE MEDICAL EXAMINER.

Vol. 6, January and February, 1843.

A case of Puerperal Fever, in a letter from Dr. D. Rutter, of Philadelphia, to Dr. Chas. D. Meigs.—Dr. R. states, that within less than a twelve-month past he has seen nearly seventy cases of puerperal fever. Respecting the treatment which he has found most salutary, he makes the following remarks:—"As to the amount of blood which we may be privileged to take away, I would (with great caution and unwillingness to intrude an opinion) observe, we can scarcely err. If called within four hours after the attack, 18 or 20 ounces may be sufficient. If not called until eight hours have elapsed, that amount may have to be repeated; if not until 24 hours, we shall rarely be able to succeed without even a larger amount; if not until 36 hours have passed by, I fear that no treatment will save the patient. Purg-ing with large and repeated doses of calomel,—assisted with some drastic article,—I hold to be all important. The other ad-juvants in its treatment I consider of but little practical importance."

Case of Aneurism of the Thoracic Aorta opening into the Left Bronchus; with remarks. By Wm. Pepper, M.D.—The patient, a seaman, aged about 35 years, was admitted into the Pennsylvania Hospital, May 25, 1842. His pulse was 85, full and regular; slight cough and expectoration of pusiform matter; at the summit of the left lung, the respiration and percussion were perfectly natural; but throughout the rest of this lung, there is no trace of vesicular murmur, and over the same extent, the percussion is perfectly flat; at the root of the lung there was bronchial respiration, and resonance of the voice. On the right side, there was nothing unusual, excepting slight bronchial respiration at the root of the lung.

On the morning of July 31st, he was walking about, and appeared in all respects as well as usual; the same evening, during a paroxysm of cough, he expired suddenly, with profuse hemorrhage from the mouth and nose. On examining his body, the

left lung, excepting a small portion of the upper lobe, was found perfectly indurated; when incised, it presented a smooth surface, of a grey colour, and slightly tinged with pink; the upper part of the lung contained no tubercles, and was entirely healthy; the bronchial tubes were dilated, and filled with fluid blood; the pleura was much thickened, and adherent throughout. The entire substance of the right lung presented the appearance of pulmonary apoplexy, and the bronchial tubes were filled with florid blood. The aorta, where it crosses the left bronchus, was much dilated, and communicated with the latter by an ulcerated opening about one-quarter of an inch in diameter; for several lines around the perforation, the mucous membrane of the bronchus was inflamed, and a small portion of it formed a species of valve to the opening. Above and below the aneurismal tumor, which extended from the third to the fifth dorsal vertebra, the aorta was perfectly healthy, as were also its valves. The heart was natural.

The existence of the aneurism was not suspected during the life of the patient. The pulsations heard at the root of the lung were sufficiently explained by the indurated lung conducting the sounds of the heart; and this condition also accounted for the bronchial respiration. Had the lung been perfectly healthy, the strong pulsations and bronchial respiration, heard at its root, would have been sufficient to indicate the aneurism, or at least to excite suspicion. In chronic pneumonia, the bronchial tubes are generally dilated, as in the present instance; and, under ordinary circumstances, bronchial respiration and resonance of the voice can be heard throughout the indurated lung.

Case of Epilepsy, induced by a blow upon the head, successfully treated. By Isaac Parrish, M.D.—The patient, aged about twenty years, accidentally struck his head with violence against the end of a gas pipe. The blow was received on the top of the head, two or three inches to the left of the sagittal suture, and was followed immediately by epileptic convulsions. The case was treated by leeches and iced water to the head, sinapisms to the extremities, and the use of saline cathartics. These afforded relief, and for eight months the patient escaped a recurrence of

the disease. After this, he was again attacked, and the paroxysms were frequently renewed, being excited by any sudden fright, by the noise of the firemen, or the ringing of the bells. The attacks were now observed to be preceded by a shoot of pain in that portion of the head which had been the seat of injury; no pain in the head was complained of at any other time. On examination of the injured part, it was evident that there was a sensitive point, although nothing externally indicated it. Pressure upon a spot about the size of a quarter of a dollar, a little to the left of the sagital suture, caused severe pain and general nervous agitation.

Aug. 1, 1840, just one year after the reception of the injury, Dr. P., assisted by Dr. T. H. Hewson, made an incision about two inches long, directly through the tender portion of the scalp, and down to the bone. Several issue-peas were inserted between the edges of the wound, and secured in their places by plaster. In a few days purulent discharge took place; a course of constitutional treatment, with tonics, salt-bath, &c., was at the same time instituted. There was a rapid amendment in the condition of the patient; no return of pain or convulsions occurred, and his general health improved. At the end of seven weeks, the soreness in the scalp having entirely disappeared, it was deemed safe to remove the peas and suffer the issue to heal. The patient has had no recurrence of his disease up to the present time, a period of between two and three years.

THE WESTERN JOURNAL.

Vol. 7, Nos. 1, 2, 3, January, February, March, 1843.

The department of original communications in these three Nos. is occupied by an *experimental and critical inquiry into the nature and treatment of wounds of the intestines*, by Saml. D. Gross, M.D., Professor of Surgery in the Louisville Medical Institute. This essay is scarcely susceptible of useful analysis; but it deserves, and, from the well-known character of its able author, will

doubtless receive the attention of the profession. Its object and plan are thus stated by Dr. Gross:—

“A monograph on wounds of the intestines has been an acknowledged desideratum with the profession. The work of Mr. Travers, the only production of the kind in the English language, has been out of print nearly a quarter of a century, and hence the only information accessible to practitioners, especially those of the United States, is such as is to be found in the various periodicals of the day, or in our systematic treatises on surgery.—The latter, unfortunately, contain little, if any thing, that is worthy of reliance; they enter into no details, and some of them do not even allude to the subject; a circumstance so much the more surprising when we reflect upon the importance of these injuries, and the attention which has been bestowed upon them by some of the most respectable members of the profession. In the present undertaking an attempt has been made to supply this deficiency, by exhibiting a connected view of the subject, embracing an account of the results of my own researches, and of those who have preceded me in the same field of inquiry.

“My investigations were commenced in the spring of 1841, and continued, with various intermissions, until a few months ago. The object was, in the first place, to inquire into the process employed by nature in repairing wounds of the intestinal tube; and secondly, and more particularly, to determine, if possible, the value of the various methods of treatment that have been recommended from the time of Ramdohr down to the present day. The experiments, upwards of seventy in number, were performed exclusively on the dog, as the most eligible animal that could be procured for the purpose, with the assistance of my private pupils, Messrs. Wendel, Comstock, Baker, Shumard, Church, Grant and Williams. Many of them were also witnessed by Mr., now Dr. Hagan, by Dr. Colescott, one of the Editors of the *Western Journal of Medicine and Surgery*, by Mr. Mullen, and by Dr. Richard Ferguson, of this city. To the latter gentleman, who has kindly furnished most of the accompanying drawings, I am desirous thus publicly to tender my acknowledgments.”

THE WESTERN LANCET.

Vol. 1, Nos. 9, 10, 11, January, February and March, 1843.

A Case of Spontaneous Evolution of the Fœtus. By Thomas Dunn.—The arm of the child was in the vagina, down to the shoulder, very much swollen, and had been presenting for several hours. Preparatory to turning, the patient was bled from a large orifice. When a quart or more of blood had been taken, she suddenly said that there was a change in the position of the child. Upon examination, the arm was found to have receded, and the feet had taken its place. Traction was made, and the patient was delivered of a dead child.

Remarks on Diseases of the Nervous System. By C. B. Guthrie, M.D., of Granville, Ohio.—The case of a lady twenty-three years of age, who for about three years has been labouring under disease of the spinal marrow. The symptoms are slight amaurosis occasionally, constant headache more or less severe, tenderness along the spine, with loss of power in the motor nerves of one side, extending to the knee and elbow. The sensibility is so great that, as has been proved by repeated experiments, she is able to detect the presence and position of the hand of another when brought within *two inches* of the part of the body thus sensitive.

A Case of Spontaneous Evolution of the Fœtus. By D. G. Gans, M.D., of Cincinnati.—An arm of the fœtus presented; nothing was done; the pains gradually ceased, but after several hours returned, and the child was born lifeless. All this was witnessed and reported by a midwife. The case is not very rare, but Dr. Gans' comment upon it is extremely so. "The whole process of parturition," he says, "is to be looked upon as an attempt of the vis naturæ medicatrix to throw off a foreign body; for the child having attained that state in which it can live alone, presents itself to the system of its mother as such, when labor commences to accomplish nature's efforts. For the purpose of accomplishing that which the midwife in this case neglected to do, namely, to assist nature by turning the child, she desists

awhile from the natural process entirely, and keeps herself passive, to allow the arm, or rather the child, to take another position, when she sets to work again to throw off the foreign body—the child.”

[We are sorry to observe, that this beautiful *morceau* of obstetrical physiology is not entirely original with Dr. Gans. Its most striking peculiarity may be found distinctly stated in the Chinese treatise on midwifery recently translated by Dr. Lockhart, and published in the Dublin Journal for January, 1842. “The fœtus,” says the celestial author of that treatise, “*is able to turn itself*, and the time that it does so must be waited for. It sits upright in the womb till the time of birth, when it bends down its head and patiently turns its body towards the contracted opening of the womb, till it comes to the gate of life; the head being then below and the feet above, as though it were suspended upside down, it comes out at once. If the fœtus has not yet turned its body, and efforts be made to expel it, then the feet will come out first; this is a strange occurrence, and it is called the *foot-treading* or *water-lily* birth. If the turning of the body be not quite complete, and an effort of expulsion be made while the fœtus lies transversely in the womb, then a hand will come out first, and this is called the *begging-salt* birth.”]

Cases illustrative of the Influence of Carbonic Exhalations from the Combustion of Charcoal for the Manufacture of Sal Aëratus. By C. Woodward, M.D., of Cincinnati, Ohio.—The cases, nine in number, all occurred in the same room, an apartment in a house adjoining a large building devoted to the manufacture of bicarbonate of potash. The symptoms were headache, sick-stomach, general indisposition, irregularity of the circulation, in several instances syncope, and in one temporary delirium.

The vicinity of the factory of sal aëratus being suspected as the cause of these occurrences, a committee was appointed by the city council to ascertain the correctness of this suspicion. It was found upon investigation, that the carbonic acid gas used in the conversion of carbonate of potash into the bicarbonate was generated from charcoal, ignited in close oblong furnaces, from which it was conducted through pipes to the chambers contain-

ing the crude potash. After saturating the alkali, the surplus gas was passed off by a tube reaching above the roof. This was a very recent arrangement; until a short time previously the owner had been in the habit of allowing it to escape through the doors of the chamber into a large unoccupied room, separated by a thin and imperfect partition from another large apartment occupied as an occasional work-shop. This again was separated by a badly built wall from the dwelling in which the cases of disease had occurred.

Professor Locke, who examined the gas generated in the factory, ascertained that it was *carbonic oxide*. "This gas," he says, "is in several respects more to be dreaded than carbonic acid. 1. It is lighter, and more readily ascending comes to be respired. 2. It is not so readily absorbed or abstracted by water or other agents. 3. When diluted with common air, it does not admonish of danger by extinguishing or materially diminishing the combustion of a candle or lamp. 4. It produces no very peculiar odor, or tingling of the nose; nor does it give any other warning by which its effects may be anticipated. The symptoms of poisoning by the two gases are in general similar; but it seems to me, by Dr. Woodward's cases, that nausea and vomiting are more decidedly produced by carbonic oxide than by carbonic acid. They are both generated, more or less, by all carbonaceous combustions and the oxide abundantly in all cases of smothered combustion, as by a bed of coals half covered by ashes."

Selections from Foreign Journals.

ANATOMY AND PHYSIOLOGY.

On the Physiology of the Nervous System: confirmation of Sir C. Bell's Views.—We have been much pleased with the perusal of a candid review, in the *Gazette Medicale*, of a work recently published at Paris by M. *Longel*, and entitled “Experimental and Pathological Researches on the properties and functions of the bundles of the Spinal Marrow and the roots of the Spinal Nerves, with an historical and critical examination of the various experiments made upon these organs by Sir *Charles Bell*, and others, &c.”

The great discovery of the English physiologist had of late years, we are told, began to be questioned, and even by some to be fairly denied; for we find that, at a Meeting of the Academy of Medicine, about two years ago, one of the members undertook to demonstrate that the doctrine of the difference of function in the roots of the spinal nerves was a mere hypothesis devoid of all solid foundation. This bold assertion was certainly combated by several of the gentlemen present; but the effects of the discussion that then took place was certainly to leave a general impression that the views of *Bell* had received a decided check, or at least that its weak side had been exposed. It was with the view of fairly setting the question at rest either one way or the other, that M. *Longel* undertook a series of experiments, which were afterwards repeated in the presence of such judges as MM. *Flourens*, *Blainville*, *Gerdy* and *Blandin*, and the result of which has been, in the language of another distinguished member of the Academy, M. *Breschet* “to give a mathematical demonstration of one of the most important facts in the whole range of physiological science.” We (the Rev.) might say that this mathematical demonstration had been already afforded by the beautiful experiments of Müller, of Berlin, on frogs, the earliest notice of which in English medical literature appeared in the pages of this Journal. The French have thought otherwise; and glad we are that the question at issue may now be considered as fairly settled even by them; for we cannot conceal our abhorrent dislike of what they call vivisections, in which unoffending brutes are made the victims of the most shocking sufferings, all with the view of advancing science! Rather perish science, we almost feel inclined to say, if it cannot be promoted save by outrageous cruelty; but, thank Heaven, there is but little need of such bloody experiments as are far too frequently resorted to by the medical men of the French school.* What a different exam-

*Shakspeare says, with no less truth than beauty, of Cymbeline's Queen—who was an amateur experimenter with “poisonous compounds” on animals!—

“Your Highness
Shall from this practice but make hard your heart:
Besides, the seeing these effects will be
Both noisome and infectious.”

ple has been set by the great English physiologist of modern times, the author of that very discovery which we are at present considering—a discovery, the beauty and value of which are co-equal with that of *Harvey* himself.

The work of M. *Longet* is divided into three parts. The *first* is occupied with a minute critical examination of all the various experiments, which have been performed by different physiologists from the period of Sir *C. Bell*'s first announcement of his views down to the present time.

"This review," says the writer in the *Gazette Medicale*, "will by many be considered severe; but no one can have a right to complain; for there is nothing personal or arbitrary in it; and if it appears at times somewhat rude, it is because facts speak for themselves, and their language is often any thing but polite, as we all well know." In reference to the experiments made by several authors on the anterior and posterior roots of the spinal nerves, M. *Longet* disapproves entirely of the plan which has been usually followed—that of merely dividing one set of them in order to judge of the effect of such a division by the paralysis either of sensation or of motion which may ensue. "The laying open of the spinal canal, independently of every other mutilation, must greatly affect the motory power of the animal; and hence, if the operator then proceeds to divide the posterior roots, the loss of motion that *may probably be* observed proves nothing, for this good reason, that it was nearly gone already. He therefore gives a decided preference to the use of *irritation* (galvanic) over that of simple *section*, in judging of the effects of such experiments. The loss of sensation in any part will always, be it remembered, influence to a very considerable degree its powers of motion under the application of mechanical or chemical stimuli."

Müller, however, it must be remembered, has anticipated by several years this very remark of our author, as may be seen by referring back to the account which we gave of his interesting experiments on frogs in this Journal, for January, 1834.

The *second* part of M. *Longet*'s work is devoted to a critical narrative of the pathological arguments in favour of *Bell*'s doctrine furnished by the histories of numerous recorded cases of disease. "Nothing," says the French reviewer, "can be more conclusive than the mass of facts thus spontaneously supplied by nature, and all converging to one point. The observations, however, being drawn from various published works, this circumstance, although it is a fresh guarantee of their authenticity, tends to deprive this portion of our author's volume of that original interest which attaches to the first and third portions. We shall only remark that, if the number of conclusive cases which he has brought together seems to be very small, this does not arise from his having designedly excluded any that appeared contradictory of his system, but solely from his unwillingness to admit any except those which contained a definite and well-marked result, whether for or against *Bell*'s doctrine. Thus out of 350 recorded cases of diseases of the spinal-marrow which he has passed under review, he admits not more than 20 in which the lesion was ascertained on dissection to be limited to one of the bundles, or to one of the series of roots, and in which the symptoms during life had been prominently marked. We may add that of these 20 cases one only has appeared to be at all opposed to the theory of *Bell*, and the details of this very case are so very imperfect that we cannot fairly regard it as a conclusive exception."

In the *third* section of his work M. *Longet* gives an excellent description of the

numerous experiments and researches which are peculiar to himself, with the view of determining the functions of the fasciculi of the spinal marrow, and of the anterior and posterior roots of its nerves. The number of the experiments which he has performed on dogs and other animals amounts to no fewer than 330, many of them too in the presence of the most competent, and sometimes even prejudiced, witnesses. The results of these experiments have been so uniformly in favour of *Bell's* views, that we may well say with *M. Breschet*, that our author has given the *mathematical demonstration* of a fact which many physiologists obstinately continued to dispute, even after the experiments of *Müller*, *Panizza* and *Valentin* were known to the public. The almost unvarying uniformity in the results obtained by *M. Longet* can only be regarded as the consequences of an established law in the animal system.

The following is the manner in which he conducted his experiments—which, however conclusive they must be admitted to be, we (the Rev.) must again express our abhorrence at, as unnecessarily barbarous and uncalled for.

The lumbar portion of the spinal canal in a dog was laid open, the anterior and posterior roots of the nerves were divided transversely, and then the one root was separated from the other as far back as the ganglion which exists on the posterior one. This being done, the *peripheral* extremity of the anterior root was laid upon a plate of glass, and the two poles of a galvanic pile—consisting of 20 pairs of 4-inch plates—were applied to this extremity. The animal exhibited no indication of pain, but violent contractions of those muscles only which receive twigs from the divided root were induced.

When the posterior roots were treated in the same manner, not the slightest convulsive movement was observed to take place.

When the poles of the instrument were applied to the *central* end of an anterior root, no movement was induced; but when they were applied to the *central* end of a posterior one, all the parts of the body (and not only that part on which the nerve whose root had been divided is distributed) were thrown into the most violent convulsions—a fact which shews they were owing to the extreme pain felt by the animal.

Similar phenomena, although in a less marked degree, were induced when a mechanical stimulus was applied in lieu of the galvanic.

As some physiologists have obtained results somewhat different from those now stated, it will be useful to allude to the causes of the errors that have been often committed in conducting such experiments. Without again alluding to the confusion that is always apt to follow the employment of an over-powerful galvanic pile, we may remind our readers that the nervous chords, being, like all moist bodies, conductors of galvanism, may transmit the galvanic fluid according to physical laws and contrarily to those of the living organization. *M. Longet* has for example satisfied himself that, by placing the posterior root of one of the spinal nerves in communication with one pole of a battery and the muscles of the thigh with another, the whole limb is thrown into convulsions: in this case the motific irritation must have travelled along a nerve which is exclusively sensory. This result is observed whenever the energy of the battery is very considerable.

M. Magendie has asserted that the anterior roots are sensory (*jouissent de la sen-*

sibilité). The experiments of M. *Longet* have been uniformly and decisively contradictory of this opinion. The discrepancy in the statements of the two physiologists may perhaps be accounted for in this way. In the dog, as in man, the lumbar or sacral nerves are sometimes observed to consist of three distinct chords; of which one belongs to the anterior and the other two to the posterior root. It may therefore very readily happen that, when an experimenter supposes that he is touching the anterior root, he may have got hold of the deep-seated chord of the posterior one, and thus that the phenomena of sensation only will be manifested, when he expected muscular contractions to be induced.

We deem it unnecessary to do more than merely to allude to the experiments described by M. *Longet* with a view of shewing that the anterior cords or bundles of the spinal-marrow itself are essentially *motific* and the posterior ones essentially *sensific*. Suffice it to state that these experiments demonstrate—as satisfactorily at least as such mutilating experiments can do—the fact of the difference in function of the anterior and posterior roots of the spinal nerves.

M. *Longet* arranges the various nerves of the body in three classes—1, nerves of special sensation, the olfactory, the optic, and the auditory; 2, nerves of motion, viz. the anterior roots of the 31 spinal, seven cranial pairs, the motors of the eye, the masticators (motor roots of the trigemini,) the facial, the hypo-glossal and the accessory; and 3, nerves of general or common sensibility, viz. the posterior roots of the spinal, the trigemini, the glosso-pharyngeal, and the pneumogastric. This arrangement is very faulty in many respects; but we cannot at present discuss the subject.

Although by the combination of sensory and motory filaments in the same sheath, the greater number of nerves become in their course endowed with compound functions, it is no less true that there are no nerves which are *mixtes* (*i. e.* sensory and motory at the same time) at their point of union with the cerebro-spinal axis. M. *Longet* has satisfied himself of the truth of this assertion by numerous experiments. When any of the nerves, placed in the class of *motors*, were divided at their origin and galvanized, contractions of the parts on which the nerve is distributed were invariably induced; and, on the contrary, whenever any of the sensory nerves was so treated, the animal always manifested pain, but there were no muscular contractions.

To ensure success in these experiments, it should be remembered—1, that the nerves experimented upon must be carefully detached from the surrounding tissues; otherwise the galvanism may act on the adjacent cord; and 2, that the nerves must be taken at their points of emergence from the cerebro-spinal axis, before they have received any *alien* filaments. It has no doubt arisen from the neglect of these precautions that different results have been obtained by different physiologists from apparently similarly conducted experiments.

By keeping in mind the important fact that many, both of the sensory and motory nerves, receive in their course filaments of a kind different from their primary cords, we can explain various morbid phenomena which are otherwise obscure.

The sensibility of the facial is derived from its anastomoses with twigs of the fifth pair. The paralysis of the velum palati, a not unfrequent accompaniment of facial hemiplegia, is at once interpreted when we understand that the glosso-pharyngeal

(a sensory nerve) receives an anastomotic filament from the portio dura. It must be admitted, however, that all the facts of this kind are not so easily explained; and it is often a difficult problem to determine, whether a communicating filament between two nerves of different functions proceed from the motory to the sensory nerve, or vice-versâ.

With respect to the great sympathetic nerve, M. *Longel* is of opinion, that each of its numerous ganglia receives from the spinal nerves both a motory and a sensory filament, and one or several twigs besides by which it communicates with the ganglia in its neighbourhood.

Before closing our notice of this valuable work, we must not omit to mention that our author has extended his researches to some of the invertebrate animals; and that he has obtained results which seem to prove that the same distinction exists between the two sets of nerves in them, as in animals of a higher grade. The comparative anatomist is aware that in the *Crustacea*, the nervous chain on each side consists of two separate longitudinal cords, of which one is superior, the other is inferior, and that it is only on the latter that there is any appearance of ganglia: This arrangement at once suggests the idea that the inferior (or dorsal) cords are sensory, and the superior are motory.

M. *Longel* performed some experiments upon Lobsters, with the view of determining the effect of irritation on these two sets of cords. He found that, when he irritated the nervous roots which proceed from the superior cord, the animal exhibited no signs of suffering; but that it always struggled a great deal whenever he pricked with a lancet one of the ganglia on the inferior cord. When the interganglionic cord was divided across, that part of the body, supplied with nerves below the point of section became motionless. By thus irritating the superior face of the caudal end of this cord, contractions, although in a feeble degree, were observed to take place; whereas, there was not any appearance of such on irritating its inferior or ganglionic face. These experiments perfectly accord in their results with those already obtained by *Valentin*, and strongly confirm the accuracy of his conclusions.—*Medico-Chirurgical Review*.

Muscularity of the Uterus.—Upon the oft-disputed point of the muscularity of the uterus, Dr. Ramsbotham states, “that however authors may write and teachers may talk about the uterine muscles, no such structure is evident to my senses: Even the able disquisition of Sir Charles Bell, (*Med. Chir. Trans.*, vol. iv.) on the muscularity of the uterus, does not convince my mind on that subject.” Upon this physiological rather than practical question, Dr. Ramsbotham’s arguments are plausible. Upon the whole it appears to us that Velpeau takes a fair and satisfactory view of the subject, and he concludes “that it is during pregnancy that we must study the tissue of the uterus for the purpose of determining its nature. It is then only that it is red, and contractile, and fibrous; that it contains a large proportion of fibrine, and that it presents, in a word, every character of the best developed muscular tissue.” If Dr. Ramsbotham is correct in asserting that “certainly the examination of the uterus in the different classes of brute animals throws no light on the doctrine of muscularity,” Dr. W. Hunter was wrong; for he says, “in the quadruped, the cat particularly and the rabbit, the muscular action, or the peristaltic motion of the uterus, is as evidently seen as that of the intestines, when the animal is opened immediately after death.”—*British and Foreign Medical Review*.

MATERIA MEDICA AND TOXICOLOGY.

Liquor Taraxaci.—A very elegant preparation has been introduced under the above title, and which, from the strong taste it possesses of the recent root, has been much used by medical men who have confidence in the remedial power of Dandelion. The following formula has been communicated to us:—

Dandelion roots, perfectly clean, *dried*, and sliced, 18 ounces.

Infuse for 24 hours in a sufficient quantity of cold distilled water to cover them.

Press and set aside, that the fæculæ may subside; decant and heat the clear liquor to 180° F., so as to coagulate the albumen; filter the liquid whilst hot, and evaporate in a dry room, or by means of a current of warm air (a water or steam bath will not succeed so well,) until the product shall weigh 14 ounces. To this must be added 4 ounces of rectified spirit. Should the roots not have been perfectly cleansed, the product must be digested with pure animal charcoal. *Liquor Taraxaci* resembles in colour pale Sherry, and possesses the acrid taste of the fresh root in an eminent degree. The dose is from one to three fluid drachms.—*Annals of Chemistry*.

Muriate of Ammonia in Hemicrania.—Dr. Watson, in his clinical lectures, thus speaks of the Muriate of Ammonia in Hemicrania:

It is well worth knowing that muriate of ammonia is most serviceable in this form of hemicrania. Of the remedial properties of sal ammonia very little is known, at least very little was so until lately; its efficacy and the mode of administering it were first made known to me by an old apothecary of this city, who had, in innumerable cases, found it a sovereign cure. It should be administered in doses of half a drachm, or a scruple, and you will find that where persons complain of pain in the jaw and the whole side of the head, the pain freely yields to this dose of muriate of ammonia. I may add that in Germany this medicine is used in many cases where we use mercury, and for the same purposes, as in hepatic affections, and that it produces the required results without any of the inconveniences attending the use of mercury.—*Prov. Med. Journ.*

Proto-sulphuret of Iron, a new Antidote for Corrosive Sublimate. By MIALHE. It results from my experiments, that the proto-sulphuret of iron, a totally inert article, instantly decomposes corrosive sublimate, giving rise to two inoffensive compounds—proto chloride of iron and deuto-sulphuret of mercury. This invaluable property leads me to announce the proto-sulphuret of iron, in the form of hydrate, as affording by far the best antidote for this poison.

At some future time I will publish the details of my chemical researches, as well as the results of the physiological experiments which I propose to institute on this subject. In the mean time, I advance a chemico-physiological proof in favor of the efficacy of this antidote which appears to possess real value.

Whenever a few centigrammes of corrosive sublimate is placed in the mouth, it immediately produces its characteristic insupportable metallic taste. It is then sufficient to wash out the mouth with the hydrated proto-sulphuret of iron, in the

state of a thin pulp, a condition in which it should always be used, to cause all the metallic taste to disappear as if by enchantment. This fact needs no commentary. It speaks for itself, without need of any explanation.

This antidote is not restricted in its effects to the soluble compounds of mercury—it serves also to destroy the injurious action of many other metallic salts, and particularly those of copper and lead.

To prepare the proto-sulphuret of iron, any quantity of pure proto-sulphate of iron is to be dissolved in at least twenty-four times its weight of distilled water, which has been boiled to drive off any atmospheric air; this solution is to be precipitated by a sufficient quantity of proto-sulphuret of sodium, likewise dissolved in boiled distilled water. The proto-sulphuret of iron thus formed is to be washed with pure water, and preserved for use in a closely stopped bottle, which is to be completely filled with distilled water.

Although the proto-sulphuret of iron may be made in a few moments, it is nevertheless proper that it should be kept ready prepared, to avoid the loss of any precious moments in a case of poisoning.

The direction to preserve this sulphuret from contact of the air should be very strictly followed, as this compound has a strong tendency to pass to the state of sulphate.—*American Jour. of Pharm.*, from *Journal de Pharm. and Chem.*

PATHOLOGY AND PRACTICE OF MEDICINE.

Engorgement of the Uterus.—In a pamphlet published by Doctor Clement Ollivier, of Angiers, on the treatment of prolapsus uteri, he speaks strongly against the use of differently shaped pessaries, which are employed indiscriminately, without paying attention to the cause of the prolapsus, which, according to Dr. Ollivier, is nothing more than an engorgement. Thence arise the symptoms which are constantly observed, and which are attributed to any cause other than the presence of a foreign body, and its contact with a painful and inflamed surface.

M. Ollivier considers that one of the most frequent causes of this affection in young girls, with whom it is very rare, is masturbation. He says, that one of the most frequent causes of chronic engorgement of the uterus in virgins, or women who do not have any communication with men, is masturbation, which, by gradually inducing disorder in the uterine functions, gives rise at first to spasms of the organ, which affects the secretion of the menstrua; on the other hand, this excitement, if frequently repeated, finally brings on a more or less intense sanguineous congestion, which gives rise to a kind of impermeability of the uterine parenchima, caused by a slight inflammatory affection; then the dysmenorrhœa, at a later period, becoming habitual, induces amenorrhœa, which ultimately determines more dangerous diseases. Sterility is always an inevitable result, unless the diseased state of the uterus being arrested, allows those portions of the viscus which continue healthy to perform their functions; the catamenia may then reappear, but are almost always accompanied by uterine colics; the matrix may recover its powers.

of conception, but during gestation a period arrives when the uterus, not being able to enlarge freely, on account of the inflammatory action it has undergone before conception, reacts upon the product it contains, and almost always determines an abortion; in this way the pregnancies of women affected with morbid conditions of the uterus almost always terminates.

Masturbation, in causing a disordered condition of the entire uterus, produces more frequently an engorgement of the body of the organ rather than of the neck, whilst an exactly contrary condition obtains in women who have connection with men. In virgins the affection of the body of the uterus is more frequently found, that of the cervix uteri more rarely.

M. Ollivier mentions, among other causes of engorgement of the uterus, the irritation of the sexual organs by primary connection, a cause of irritation of the organ the more dangerous, that it has hitherto escaped the notice of medical men, either because they do not attach sufficient importance to it, or because women conceal from them the knowledge of their illness, notwithstanding the sufferings they endure.

The dysmenorrhœa, which almost always follows abortions, is the result of an inflammatory engorgement more or less considerable, and susceptible of cure; this engorgement is the cause of the sterility that follows miscarriages. The frequency of these inflammatory engorgements observed by the vulgar has rendered abortions more dangerous in their eyes than a delivery at the full period; when they take place during the first pregnancy, they are the more frequently to be attributed to a too great sensibility of the uterus, as yet unaccustomed to the sensations produced by coition. It is this sensibility which gives rise to consecutive inflammatory symptoms; under other circumstances, this uterine sensibility causes the disorders which precede menstruation.

M. Ollivier attributes the sterility which occurs to most women in large towns, after their first and second labors, to a similar cause. The editors of the "*Journal de Médecine et de Chirurgie Pratiques*" observe, with respect to this opinion, that they agree with M. Ollivier, that the engorgement of the uterus may sometimes prevent conception, but that another cause for this pretended sterility in great towns, and Paris especially, must be sought for. Considerations of a different kind will explain the small number of children found in families, whose pecuniary means are not in just relation with their daily expenses.—*Provincial Medical Journal*.

Fatal Case of Acute Pleurisy and Effusion; with practical remarks on this disease.—A middle-aged man, soon after recovering from a protracted attack of dysentery, was suddenly seized with pain in the left side of the chest, which had been gradually increasing for eight or nine days before he applied for medical relief.—The pain at this time was very severe at one point immediately below the mamma; it was much increased by deep inspiration, and by the cough, which was dry and of a convulsive character, returning frequently in fits of five or six minutes duration. The patient could not lie upon his right side; the easiest position being on the back. Percussion elicited a clear sound from the right side of the chest; but there was a dull resonance over the lower half of the left one. The respiratory murmur however was, we are told, perceptible on both sides; but it is added afterwards, "we thought that we could hear an ægophonic sound over the seat of the pain."—

(This remark seems to be the result of an *arrière-pensée*, *Rev.*) The pulse was rapid and tolerably firm, and the breathing was much hurried.

On this day (7th of Nov.) he was bled to twelve ounces, and twenty leeches were applied over the seat of the pain. The bleeding was repeated in the course of the evening, in consequence of the severity of the cough: the blood on both occasions was covered with a dense buffy coat. On the following two days he was again bled, and on the latter, a blister was applied on the left side. A mixture with syrup of poppies and nitre was also ordered at the same time. The symptoms were somewhat relieved, but only for a short time; for on the 11th we find that the cough is reported as being as troublesome as ever, and the pain still severe: "persistence also of the dullness of the chest and of the absence of the respiration." (This is the first notice of any absence of the respiratory murmur.)—The blister was ordered to be kept open; and the patient was advised to inhale the vapour of an infusion of belladonna flowers to relieve the cough, which was still most distressing. The expectoration had hitherto been very scanty, but about this time (14th) it began to be more abundant. The whole of the left side was now dull on percussion, and a bronchial respiratory sound was audible over its entire extent; the pulse and breathing were still very rapid, although the pain was considerably less, and the cough was a good deal abated. The doses of the nitre were considerably increased in the hope of stimulating the absorption of the effused fluid.

The dyspnœa, however, became more and more distressing, and the only position in which the patient could lie was on the left side: the number of the respirations was nearly sixty in the minute, and the pulse was rapid and feeble. The operation of paracentesis was therefore performed without further delay; about eight ounces of a transparent serosity flowed from the canula, and the discharge was then stopped. The patient experienced considerable relief for some hours afterwards; but, the dyspnœa again increasing towards evening, eight ounces more were withdrawn. A quiet night followed, and altogether the patient was easier next day.

On the following days (17th and 18th) eight ounces were again withdrawn each time by the canula, and nearly as much flowed out from the wound by the side of the instrument; a few bubbles of air escaped the last time. On the 19th, the resonance of the affected side on percussion was greater than in health; but no respiratory murmur could be heard on auscultation; bubbles of air continued to ooze from the wound. The canula was therefore taken out. For two or three days a considerable diarrhœa had been present, and tended to exhaust the patient's strength. On the 25th, a mucous rale was audible on the right side, and a slight gurgling and amphoric sound on the left; the air entered and escaped freely through the wound during the acts of coughing especially. On the 28th he died.

Dissection.—On making an opening into the left cavity of the chest, a quantity of fetid gas made its escape, and some purulent matter was found within. The pulmonary and costal pleuræ were invested in almost their entire extent with a false membrane. The lung on this side was rather denser than in health; but it readily crepitated on pressure. The right lung was nearly sound, and the heart was quite healthy. The viscera of the other cavities exhibited no unusual appearances.

(*Remarks.*—There are few diseases, the diagnosis and the successful treatment

of which require more tact on the part of the physician than pleurisy accompanied with effusion into the cavity of the chest. As long as the symptoms are acute—the pain in the side being very severe and much aggravated by a deep inspiration or by coughing, and the symptoms of synocha being present—there can be no difficulty, as a matter of course, in determining the proper treatment to be adopted, whether we have reason or not to suspect the existence of fluid in the pleuritic cavity. A vigorous antiphlogistic practice must be pursued until the inflammation is subdued. But in the majority of cases the symptoms are much more perplexing, when the effusion has once taken place. The pain has usually abated a great deal; but the breathing is more oppressed, and the general anxiety of the patient is much greater. He cannot lie upon the healthy side; and sometimes the only position in which he can find ease is on his back. In certain cases, even when the effusion may not be very great, the dyspnœa amounts to more or less complete orthopnœa. The cough is usually distressing, recurring at short intervals in fits of great severity, and it generally resists every form of opiate or other narcotic medicines. No sooner has the patient fallen asleep than he is probably awakened with a paroxysm which quite tears him to pieces, and the severity of which leaves him much exhausted for the time. The cough is generally dry, hard and shrill—it is always worse when the head is laid low. There is usually little or no expectoration. This peculiar convulsive sort of cough, the distress in the breathing in the reclining position, the inability to lie on one or on both sides, taken in conjunction with the auscultatory signs—the dullness on percussion of the affected side over a greater or less extent, and either the absence of all respiratory murmur or the substitution for it of a bronchial sound—are the characteristic indications of pleuritic effusion. An unpleasant symptom, and one too very generally present, is an extreme rapidity of the pulse, which is almost always weak and compressible at the same time.

Not a few cases of this dangerous malady are mistaken by medical men for bronchitis, or for phthisical disease of the lungs, and they often go on prescribing for the symptoms for days and weeks, without even suspecting the existence of effusion into the chest. We have the authority of the late Dr. Hope that more than one eminent physician of this metropolis has, to his knowledge, mistaken the nature of such cases, so far as even to recommend their patients to try the effect of a residence in a warm climate, erroneously supposing that they were labouring under tuberculous consumption. It is unnecessary to dwell on the treatment of pleuritic effusion, as we fully concur in all respects in the judicious advice given by this lamented physician. The course pursued by Dr. Lequière (the narrator of the preceding case) was feeble and most unsatisfactory. He seems not to be aware of the powerful effects of mercury, especially when combined with squills and digitalis, in promoting the absorption of the effused fluid; neither does he appreciate the great value of repeated large blisters to the affected side—and yet these are the most efficient of all remedies.—Then again the practice of leaving the canula in the wound made by puncturing the chest, so that the air readily passed in and out of the chest, cannot be too severely reprobated. There may be a few cases, when the disease has been of old standing and the constitutional symptoms are not severe, where this may be hazarded; but, as a general rule, the wound in the chest cannot be too quickly healed. Fortunately however the extensive experience of Dr. Hope, and also of Dr. Stokes of Dublin, has fully proved that the operation of

paracentesis thoracis is very seldom necessary, as the effused fluid may generally be caused to be absorbed by the use of judicious internal remedies.—*Medico-Chirurgical Review.*

Cancer of the Stomach, by Dr. Watson.—From amongst some good remarks on cancer of the stomach we select one or two.

Occasional Obscurity of Symptoms.—"Not long since I saw, in consultation, an elderly clergyman who complained of pains in his back, which were brought on or aggravated by certain movements of the body. His bowels were costive: and purgatives always relieved his pains. He was passing lithic acid gravel. The pains were felt in or near the renal region. Several years before he had suffered in a similar manner; and had then been cured by being cupped in the loins. What was the matter here? Was it lumbago? Was there a calculus in one of his kidneys? These were the best guesses that I could make. The eminent physician whom I met, and a surgeon of no less eminence, who had seen the patient previously, had not been able to attain any more exact diagnosis. Upon this gentleman's death, which occurred not long afterwards, his disorder was discovered to have been cancer of the stomach. Excepting slight sickness a day or two before he died, there had been no symptom to direct attention to that part."

Pulsating Tumour occasioned by Scirrhus.—A young woman came into the Middlesex Hospital, under one of Dr. W.'s colleagues, with a pulsating tumour in her epigastrium. It was thought, at first, to be an aneurism, and the case attracted, on that account, a good deal of notice. But the tumour subsided very much after free purgation. This led some to suppose that it was formed by accumulated feces in the transverse colon. There was no sickness; nor indeed any one symptom referable to the stomach. She died. The tumour was cancerous; and in the stomach. Lying in front of the abdominal aorta, it had been lifted by its pulsations.

We were requested about a year ago, to meet a gentleman in consultation on a somewhat similar case. But the pulsating tumour was in the *left iliac* region.—It was small and firm, and pulsated strongly. We gave it as our opinion that the case was either one of scirrhus of the omentum, or of the pylorus. It turned out to be one of the latter.

General Laws with regard to the Symptoms.—1st. That there is more suffering *cæteris paribus* when the cancerous disease is situated at, or very near, either extremity or orifice of the stomach, than when it occupies the intermediate parts: whether in the greater, or in the lesser curvature.

2nd. That when the cardia, and its immediate neighbourhood, is the part solely or principally diseased, the food and drink find a hindrance in passing into the stomach; but being once there, the distress is over. The symptoms are very like those of structure of the œsophagus. The morsel reaches the bottom of that tube, and there causes uneasiness, till at length it is brought up again through the mouth, or passes gradually in the natural direction.

3rd. That when, on the other hand, the disease is limited to the pyloric end of the stomach, the food enters that bag readily enough, and remains there for a certain time; then uneasy sensations arise, and the imperfectly digested meal is apt to be rejected by vomiting.

Development of Phthisis in Cotton Factories.—Among the peculiar evils of the factory system, the production, or premature development of phthisis, seems to have been more generally dwelt upon than any of its other presumed ills. The facts and statements of M. Villermé give an especial prominence to this presumed result of the cotton manufacture, traceable, in his view of the case, mainly to the bronchial irritation caused by the inhalation of dust and cotton flue, and exhibiting itself in a high degree among the batters and carders of cotton, classes of workpeople mainly subjected to this agency. We confess, for our part, that when, in the discussion of any matter of this kind, great stress is placed upon the reasons why a certain consequence must follow, we are generally led to mistrust the accuracy of the fact itself. We always suspect that the observer's attention is excited unduly by instances that seem to realize the expectation, and that what furnishes no corroboration of his anticipations is but little regarded. Medical men, in such cases, too commonly ascribe the results in the language of Mr. Chadwick, "of a cluster of causes to one; and in respect to several classes of workmen, the real cause, the invariable antecedent, is unnoticed." And thus—with minds prepossessed with the notion that tubercular consumption originates essentially in bronchial irritation, and that the atmosphere of cotton mills is exceedingly conducive to the development of this latter—every case of phthisis, occurring among the factory population, is sure to be attributed to the one presumed cause. We ourselves believe that, in the present state of our information this peculiar influence of cotton mills is, to say the least, entirely without proof; and, so far as our information extends, we think that any impartially selected, or promiscuously gathered body of facts would go to show that the idea receives no support whatever, when fairly put to the test. Amongst other communications elucidating this affair of factories, read at the British Association's last meeting, a paper, since published in the Journal of the Statistical Society, was read by Mr. Noble of Manchester.

Treatment of Impetigo.—We agree with MM. Cazenave and Schedel that the preparations of sulphur have been too generally recommended in impetigo, and that their indiscriminate employment, especially in the early stage, is often decidedly injurious. When the disease is limited, and the local symptoms are mild, emollient and sedative fomentations, the warm bath, vapour bath, or douche, are the best local applications that we can employ, acidulated drinks being at the same time administered internally: general or local bleeding is seldom necessary. "In the treatment of impetigo," Mr. Plumbe well observes, "the frequent removal of the diseased secretion has never been considered of sufficient importance; the benefit of this step, if carried into effect by frequent ablution of the part with warm water, is incalculable. By this plan, in conjunction with the exhibition of simple alteratives, entirely rejecting any thing in the shape of ointments, or other greasy applications, the disease will be often readily subdued. The part may be kept in a state of moisture at other times, by covering it with oilskin, or by the application of soft linen wetted with the Liq. plumbi acet. dil." The hydrocyanic acid in the form of lotion, combined with alcohol and acetate of lead has been highly recommended by Dr. A. T. Thomson; he observes that he found it to allay the ir-

ritation more effectually than any other application; the following is the formula which he employs:

Rx	Acidi hydrocyanici	f. ʒ iv.
	Aquæ distillatæ	f. ʒ vij.
	Alcoholis	f. ʒ iv.
	Acetatis plumbi	gr. xvij.

M. ft. Lotio.

Mr. Plumbe, in his *Practical Treatise*, recommends a formula nearly similar, but without the acetate of lead, and observes that "of all external applications he has found none equal in efficacy to it;" he directs the part to be kept constantly covered with pieces of linen wetted with it. M. Rayer, however, observes that lotions composed of sulphuric or nitric acid largely diluted with water are equally efficacious.

In the chronic forms of impetigo, the sulphureous preparations are more decidedly indicated, and may be employed both internally and externally; and the warm bath and vapour douche here will be found valuable adjuncts in restoring the healthy action of the skin. "Should the disease resist these measures, lotions containing sulphuret of potash, nitric acid, or nitrate of silver, may be in turn had recourse to." Creosote ointment, oxide of zinc, acetate of lead, and citrine ointment have been also employed with advantage; and when the disease is limited, a blister applied to the diseased part, as recommended by MM. Cazenave and Schedel, has often proved beneficial. M. Rayer says he has treated very obstinate impetigo successfully by nitric acid, in doses of half a drachm daily in a pint of barley-water, sweetened to the taste; "it very seldom happens that this medicine is continued for a month or six weeks without accomplishing a cure." If all these remedies fail, MM. Cazenave and Schedel observe, we must have recourse to the arsenical preparations, (as Fowler's solution,) which is generally followed by the most surprising effects."—*Br. and For. Med. Rev.*

Delirium and Coma with the Pneumonia of Children.—Delirium and coma are almost the only forms of cerebral disturbance which coexist with pneumonia in the adult. In the child, however, the cerebral symptoms are much more varied. Violent convulsions sometimes occur, accompanied with twitchings of the limbs or paralysis of some of the extremities, and occasionally those symptoms come on without previous convulsions. Sometimes the symptoms so closely resemble those of ordinary hydrocephalus, that, without having recourse to auscultation, the most acute and well-practised observer might be deceived, and yet on examining the body after death, the brain appears quite natural, or a slight and scarcely appreciable congestion is the only point in which it differs from a perfectly healthy state. But, difficult as the diagnosis of pneumonia may be in some cases, that of pleurisy is often still more obscured by similar causes. The head affection which accompanies it, and often ushers it in is more violent than in pneumonia; the child's restlessness renders auscultation less easy, and the signs which auscultation furnishes are less clear and more readily overlooked than those which announce inflammation of the lung.—*Ibid.*

Pleurisy in Children.—Pleurisy is not, as the statement of some recent writers might lead the student to suppose, a disease of rare occurrence in the young subject. The laborious dissertation of M. Baron, some of the results of which are presented to us by M. Berton, has set at rest the question on which very conflicting opinions had prevailed. He met with traces of pleurisy in the bodies of 159 out of 403 children, or in rather more than one in three. From his researches it further results that the frequency of pleurisy differs greatly at different periods of childhood; that it occurs oftener during the first five days after birth than at any other time in the first month of infancy; that it diminishes in frequency from the first month to the second year; that from the second to the third year it is more frequent than from the third to the fourth, or from the fourth to the fifth year. It continues rare during the remainder of childhood, and is especially so from the thirteenth to the fourteenth year. M. Barrier, whose observations were made among children from two to fifteen years of age, states that he has never met with a case of pleurisy unconnected with pneumonia in children under six years old; that from six to ten it is rare; but that from ten to fifteen it is as frequent as in the adult. The number of cases from which he draws this conclusion is not stated by M. Barrier.—*Ibid.*

SURGERY.

Treatment of Hydrocele by Electro-Puncture.—Dr. LEROY D'ETIOLLES has been engaged lately in some interesting experiments at the Hôtel Dieu, with the view of testing the influence of *Electro-puncture* in promoting absorption. I have assisted him in several operations, which have so far, however, been confined to hydrocele: the cases selected were of long standing, but in other respects favourable. A needle was introduced into the cavity of the tunica vaginalis, and another into the subcutaneous cellular tissue of the scrotum; these were then connected with the poles of a small galvanic battery, and the acid solution poured on to the plates. The patients complained, at first, of a shock, and afterwards of disagreeable and slightly painful *burning* sensation. The galvanic action was continued for fifteen or twenty minutes on each occasion, and renewed about every sixth day. In two cases that I have watched closely, the cure was completed after the third application of electricity; i. e., the whole of the effused liquid had been absorbed; it remains, however, to be seen whether the disease will not recur. This method has not yet been reduced into a regular system of treatment, and until some time shall have elapsed, and a greater number of experiments been made, it will be impossible to form a just estimate of its value as a therapeutic means, in cases of serous effusion.—*Medical Examiner*, April 29, 1843.

New Remedy for Scalds and Burns.—Mr. WM. RHIND recommends as a remedy for burns and scalds, a solution of gum-arabic, repeated coats of it being applied; so as to form a complete covering to the injured parts. He relates several cases in

which he tried it, and states that in all relief was procured in a very short time.—The more recent the case, however, the more speedy was the removal of the pain. In those cases where blisters had appeared they were opened, and the solution applied; very frequently the application of the solution prevented the effusion of more serum; in some cases, however, serum was again effused and again evacuated.

In those distressing cases of the extensive burning of the bodies of young children, Mr. R. states that he would not hesitate applying the solution over the whole body, at about the warmth of 96° . It does not cool down the system (he remarks) by sudden evaporation or sudden abstraction of heat, like a common cold fluid, a circumstance in most cases to be dreaded, for gum is a bad conductor of heat; neither does it preclude an exposure to moderately cool air, which seems to keep down the excessive irritation consequent upon extensive scalding of the skin.

As it is of consequence to have the solution prepared instantly, the powdered gum, if it can be procured, may be in a few minutes dissolved in warm water. If this is not ready prepared, the common gum in small particles roughly pounded, will very soon dissolve, and the application in any case may be applied at a temperature of 90° or 100° , although in general it is more soothing when applied colder. Rancid gum solution should not be used, as it in this state has lost its adhesive quality. Two, three, or four applications may be necessary at intervals of five or ten minutes. The skin should be previously freed of all oily matters, and the first coating, in order that it may be insinuated closely into the furrowed surfaces of the skin, should be rather thinner than the subsequent ones. In order to produce the proper effect it should form a varnished coat of some thickness and closeness over the whole space of the burnt part.—*Edinburgh Med. and Surg. Journ. Oct. 1842.*

Cause of Caries of the Teeth.—Prior to the appearance of the first edition of Mr. Robertson's treatise, in 1835, the prevailing opinions concerning caries of the teeth were those of Fox and Bell; the former maintaining that the disease consists in an inflammation of the bony substance of the crown of a tooth, which secondarily affects the lining membrane of the organ, causing its separation, and a consequent decomposition of the solid parts; the latter insisting that caries commences in inflammation of the bone immediately under the enamel, from which, he says, the tooth, owing to its imperfect vitalization, cannot recover, and death and decay are the consequence.

Mr. Robertson, on the other hand, maintains that the remote cause of destruction of the teeth is the decomposition of food which lodges in the interstices between them.

The inflammatory theory, then, is to the effect that the teeth decompose by vital action, commencing in their interior, and proceeding to their surface. Our author's theory is exactly the opposite, namely, that decay begins by chemical action upon the surfaces of the teeth, and proceed to their interior, and that inflammation is the consequence, and not the cause, of caries. His arguments are chiefly derived from the fact, that the teeth decay only in such situations as are favorable for the lodgment and decomposition of food, and never upon their smooth and even surfaces; from their decaying in pairs, and at particular periods of life; from the

ready relief which filling and filing afford, if decay be not too far advanced; from the disease commencing externally and proceeding inwards, and never conversely; and from the circumstance, that artificial teeth are liable to the same species of destruction as natural ones.

These arguments we apprehend to be perfectly sound, and in accordance with the rules of common sense and experience; for we cannot imagine a disease, which owes its origin and progress to inflammation, to be susceptible of alteration or cure by means which, of all others, are most calculated to contribute to such action.—But when the cause is purely chemical, and owing primarily to a defect of structure, it is not irrational to suppose that mechanical treatment will arrest or remedy it. It is on this ground that we think the practical application of Mr. Robertson's theory particularly valuable. Believing, as he does, that inflammation is not the cause of caries, but the consequence of it, and dependent upon the influence of atmospheric and other agencies upon the lining membrane of a tooth, he urges the necessity of removing any decay that may be apparent, *before the occurrence of pain*; for after its commencement there is little hope of a permanent remedy. He insists upon the propriety of constantly using a tooth-brush, so that any particles of decomposing food may be removed; and of an occasional inspection of the teeth by a dentist, that any lurking decay may be arrested. He tells us that these suggestions have wrought a considerable change in his own practice—that people now apply to have their teeth removed in consequence of its ravages; and he maintains that, if this plan were universally acted upon, tooth-ache would be comparatively unknown, and the organs would be preserved in beauty and usefulness to the remotest period of life.—*London Medical Gazette*.

Treacle and Water for Burns.—Mr. Bully used this with very good effect in a case of scald from melted pitch. In the first instance he employed a paste composed of equal parts of treacle and flour. We need not mention the particulars of the case, but content ourselves with the concluding remarks of Mr. Bully.

“In recording the treatment adopted in the foregoing case, I do not wish to take any credit to myself for employing a remedy with the virtues of which, in such cases, surgeons have been long acquainted. Mr. Greenhow, of Newcastle, first introduced it into practice, using it as a defensive, for the purpose of preventing the access of air to the denuded parts. He did not, I believe, continue to use it throughout the whole progress of the case, but substituted for it other applications which the circumstances of the case might afterwards seem to require. In the commencement of the preceding case I used it, mixed with flour, for the same purpose of excluding air, but finding it occasioned pain, and that I could not properly see what was going on underneath, although it had seemed to promote the growth of granulation, I determined to use equal parts of treacle and water, on rags, constantly applied as a lotion to the injured surface. The application of treacle in this manner has convinced me by the result of this, and other cases similarly treated, that it has some specific effect in expediting the cicatrisation of burns and scalds, however extensive they may be, and that it prevents, in a great degree, the unsightly puckering and contraction which too often interfere with the proper actions of joints involved in these accidents. I have, since that time, had several opportunities of testing its value as a remedy in these cases; and have, from what

I have seen of its effects, adopted it in every case of the kind which has come under my care, both in hospital and private practice; and in each case it has seemed to have been instrumental in preventing, or at least diminishing, the chances of consecutive contraction,"—*Medico-Chir. Rev. from Provincial Med. and Surgical Journal.*

Successful Amputation during the progress of Traumatic Gangrene; by Mr. Toogood, Surgeon to the Bridgewater Infirmary.—*Case.*—Charles Tuck, a farm servant, aged 24, received the contents of a common fowling-piece in the hand on Friday, the 4th of February, which passed up the flexor muscles and through the integuments of the fore-arm about three inches above the wrist. A neighbouring surgeon saw him soon after the accident, and directed cold applications and rest.—On the following Monday he was admitted into the Bridgewater Infirmary. There was a ragged wound at each opening, the limb was but little swollen, and the only unfavourable appearance was, that the nails looked rather dark coloured. There was very little constitutional disturbance. He was put to bed, a poultice applied over the whole limb, and the usual treatment directed. On the next day the aspect of the limb was the same; but as there was more swelling in the evening and some heat, leeches and fomentations were ordered. He slept perfectly well until five o'clock the following morning (Wednesday), when he was awoken by pain, which rapidly increased and became very severe. At seven o'clock the limb was found to be gangrenous to the elbow, and before his consent to its removal could be obtained, and the necessary preparation made, it extended so high up, as barely to leave room to amputate close to the shoulder joint. There was no line of demarcation, but I cannot, at this distance of time, recollect the precise point to which crepitus extended, but I am inclined to believe it was quite to the joint, as it was debated whether it would not be the safest plan to remove the bone from the socket. Very little blood was lost during the operation; the constitutional irritation subsided in a few hours; the patient became tranquil and soon recovered.

Every case of this kind is a valuable accession to the stock of practical knowledge.—*Provincial Med. and Surg. Journal, Feb. 1842.*

A similar case is related in the *Medical Gazette* for Feb. 1842—*Case.*—David Wright, æt. 23, admitted Sept. 12, 1841, was brought to the hospital early in the morning in a state of intoxication, having been engaged in a street fight. The left arm presents the following appearances: there is a wound at the inner side of the elbow-joint three inches in length, extending obliquely over the inner condyle of the left humerus, which, with the trochlea surface, lies exposed in the wound, but does not protrude; the ligamentous and tendinous structures at the inner side of the joint are completely divided, and two small portions of bone, detached from the interior condyle, can be felt in the wound; the olecranon process projects backwards remarkably, and on further examination it appears that the joint has sustained a dislocation of both bones backwards. On introducing the finger into the wound, and grasping the parts in front of it, no pulsation of the brachial artery can be perceived; the sensibility of the hand and fingers is unimpaired: considerable venous hemorrhage seems to have taken place, but the bleeding has now nearly ceased. After removing the loose fragments of bone, and reducing the dislocation (which was very easily effected by slight extension,) the edges of the wound were

brought into opposition by strips of adhesive plaster, over which a piece of lint dipped in blood was applied : the fore-arm was brought to a right angle with the arm, and the joint kept perfectly quiet by being laid on a tin splint. On the morning of the 15th, a gangrenous spot was observed at the inner side of the fore-arm. On the 16th, the gangrene had considerably extended, involving nearly the whole of the fore-arm, and extending rapidly to the arm ; no appearance of a line of demarcation could be observed ; the countenance had become anxious, features sharpened, pulse 120, and weak. A consultation was then called, at which it was resolved to perform immediate amputation of the member, which was accordingly done four inches below the shoulder. The operation was performed by the circular method, but presented no point of interest ; the stump went on favourably, his general appearance progressively improved, and on the 19th October he was discharged.

MIDWIFERY.

Nursery Treatment of Infants, submitted to Prince Albert, by Joshua Waddington, M.R.C.S.

No other kind of milk to be given to an infant in addition to the milk of the mother or wet-nurse.

The less rocking the better.

When asleep, to be laid upon its right side.

The best food is "Lemann's biscuit-powder," soaked for twelve hours in cold spring-water, then *boiled* for half an hour, not simmered, or it will turn sour.—Very little sugar to be added to the food, and then only at the time when given.

Sweets, of every kind, are most injurious, producing acidity, flatulency, and indigestion, sores in the mouth, and disordered secretions.

An infant will take medicine the more readily if made lukewarm in a cup placed in hot-water, adding a very little sugar when given.

The warm-bath (at ninety-four degrees of heat, not less, for ten minutes, every other night,) is a valuable remedy in many cases of habitual sickness or constipation.

"Soothing-syrup," sedatives, and anodynes, of every kind, are most prejudicial. They stop the secretions. A very small dose of laudanum given to an infant may produce coma and death.

When an infant is weaned, which is generally advisable at the age of nine months, it is of the utmost importance that it be fed with the milk of one cow, and one only (a milch-cow,) mixed with "Lemann's biscuit-powder" (prepared as before directed) and very little sugar.

Boiled bread budding forms a light and nutritious dinner, made with stale bread, hot milk, an egg, and very little sugar.

When an infant is twelve months of age, bread and milk should be given every night and morning : stale bread toasted, soaked in a little hot-water, and then the milk (of one cow) added cold.

Solid meat is not generally required until an infant is fifteen months of age, and then to be given sparingly, and cut very fine. Roasted mutton, or broiled mutton-chop (without fat,) is the best meat; next to that, tender lean beef or lamb; then fowl, which is better than chicken; no pork or veal; no pastry; no cheese; the less butter the better.

An infant should not be put upon its feet soon, especially while teething, or indisposed.

Avoid over-feeding at all times, more particularly during teething. It is very likely to produce indigestion and disordered secretions, the usually primary causes of convulsions, various eruptive complaints, and inflammatory affections of the head, throat, and chest.—*London Lancet*.

Observations on the Incipient Stage of Cancerous Affections of the Womb. By Dr. Montgomery, Dublin.—I am satisfied, that there is a stage of cancer uteri which precedes the two usually described by authors; a stage, in which, the nature of the disease may be detected, its farther progress arrested, and its germs destroyed, and the reason why this stage is not more generally recognized is, that the accompanying symptoms are frequently so slight as to attract very little the attention of the patient, and thus, are suffered to remain without treatment, until a profuse hæmorrhage, or some violent fit of pain sounds the alarm, and then, on examination, the disease is found to have passed into its second stage; the surrounding tissues are indurated and consolidated with the organ concerned, and no human means hitherto discovered can do more than blunt the thorns thickly strewn along the path, which the sufferer must tread, to ‘the house appointed for all living.’

Symptomatology.—Sharp, but fugitive and lancinating pains in back and loins—across the supra-pubic region or along the front of the thigh—sometimes in the direction of the sciatic nerve, producing numbness, or debility of the limb. In a large proportion of cases, there will be found a decided fulness, or even a distinct tumour in one or other iliac fossa, with fixed pain, tenderness on pressure about the inguinal ring—irritation of bladder—dysuria—sensation of piles about the rectum, &c. The mænstruation is sometimes disturbed, often quite regular—occasional bursts of hæmorrhage—little or no leucorrhœa—unimpaired appetite (till the complaint has lasted some time)—disturbed sleep—flabbiness of flesh—pallor of countenance.

Examination.—Margin of os-uteri hard, and often slightly fissured, projecting more than natural into vagina, irregular in form. “In the situation of the muciparous glands, there are felt several small, hard, and distinctly defined projections, almost like grains of shot, or gravel, under the mucous membrane. Pressure on these, with the point of the finger, gives pain, and the patient often complains that it makes her stomach feel sick.

The cervix is, in most instances, slightly enlarged and harder than it ought to be. The circumference of the os-uteri, especially between the projecting glandulæ, feels turgid, and to the eye, presents a deep crimson colour, while the projecting points have sometimes a blueish hue.”

This stage is very slow—being sometimes spread over years, before the second stage sets in.

Pathology.—Dr. M. is convinced that, in a great majority of cases, the first mor-

bid change takes place in and around the muciparous glands which exist in such numbers in the cervix and margin of the os-uteri, which become indurated by the deposition of scirrhus matter around them. They feel at first like shot or gravel, and afterwards become unequal, bumpy, or knobbed, like the ends of one's fingers. This is the *second* stage of the disease, though usually described by writers as the *first*. It is irremediable.

Diagnosis.—The “IRRITABLE UTERUS” is the only complaint which can be confounded with the one under consideration. The *former* never produces organic changes—the *latter* does. The *former* is therefore unaccompanied by any enlargement of volume in the parts, which always accompanies or soon follows the disease now treated of.

Treatment.—Local leeching or cupping, with anodyne fomentations, form the first step in the treatment. Mercury, in some form or other, is almost indispensable, so as to bring the system very gently, but decidedly under its influence.—It may be combined with very small doses of iodine, in conjunction with camphor, opium, hyoscyamus, or cicuta. “Afterwards, iodine or hydriodate of potash may be used both internally and externally; and iron will be found a most beneficial and powerful agent, especially in the form of the saccharine carbonate, or the carbonate given in the nascent state.

The iodide of iron, which combines, to a certain degree, the powers of both remedies, may also be used with advantage in most cases, and will be best administered in the form of Dupasquier's syrup, which is now prepared, of different strengths, by our chemists and apothecaries.”

Our author has observed marked benefit result from the exhibition of arsenic in this dangerous complaint. Counter-irritation, the half-bath, injections of warm water into the vagina—and, when congestion is removed, and morbid sensibility only remains, anodynes added to the injections will be serviceable.

Every kind of irritation and excitation should be sedulously avoided, and the most mild and abstemious diet enjoined.

Although this is the stage in which amputation might be successful, yet our author does not recommend it, “because the operation is a very formidable one, and he knows the affection to be curable without it.” This is a very substantial reason for eschewing the operation certainly.

We have thus condensed the valuable matter of this communication of Dr. M.'s and have no doubt that it will prove acceptable to our readers. Some cases in illustration are added; but we are unable to comprehend them in this brief article. They are highly deserving of perusal by the medical practitioner.—*Dub. Jour.*

Miscellaneous Articles.

Smallpox in Boston.—Since the early part of October this disease has been common in Boston, and it still exists with considerable activity. Just as long as there are unvaccinated persons in town, it will continue to be propagated from one to the other. It is not kept here, however, by the native inhabitants, but by strangers who are temporarily in the city. The State of Maine is presumed to supply more subjects for the smallpox in Boston, than all the rest of New England. Young men and women are constantly coming to the city from that State for employment, without having been vaccinated. After the lapse of two or three weeks they often contract the disease, without knowing how or where. Many of them are thrown upon the charity of their acquaintances, should they happen to have any, or at once become a public charge. Those who recover are of course sometimes shockingly scarred and pitted, and their faces, which were once fair and regular, wofully changed. Although the fact is well known that the people of Maine are such great sufferers by smallpox, not only in Boston, but wherever they happen to wend their way, it seems to lead to no effort at home to protect the people. No regard seems to be paid to the greatest discovery of the age, in any of the large towns in Maine. Till some systematic course is pursued to extend the benefits of vaccination, beginning with children at the district schools, the loss of life will be continued and be annually increasing from this same melancholy cause.

We have no precise means of ascertaining the number of cases of smallpox which have occurred the present winter in Boston: that they have been exceedingly numerous, is placed

beyond a doubt. Admitting that the average rate of mortality is as one in ten, there must have been over three hundred sick with the genuine or modified form of smallpox, since the first of October, as there had been 38 deaths up to Saturday last. This is a plain statement, which is sufficiently alarming to induce those who are still unprotected, to avail themselves at once of the only sure preventive known.

No child can gain admission to a public school in Boston, without a certificate of vaccination. That no parent shall plead inability to comply with this excellent law, ample provision is made for gratuitous vaccination of the poor, every day in the year. However rife the smallpox may be, therefore, at any time in Boston, the schools, in which over ten thousand children are taught at the public expense, are never interrupted by smallpox—for no pupil is susceptible of the disease. When other cities and towns adopt the same prudent system, the alarms created by cases of smallpox will be very rare, and deaths from that cause almost unknown.—*Boston Med. and Sur. Jour. March 1, 1843.*

Report of the French Academy on Vaccination for the year 1840.—During the year 1840, 836,789 births took place, and of this number 525,509, or five-eighths, were vaccinated, leaving three-eighths unprotected from the contagion of small-pox. Particular reports were only received for 45,060 of these cases of vaccination, and of that number, 44,179 took the vaccine disease perfectly, whilst in 881 cases the vaccination failed. From this it appears, that rather more than a half of all those born during that year remain unprotected from the contagion of small-pox. In two cases, vaccine eruptions appeared over the body, and the fluid from the vesicles produced the true vaccine disease in those who were inoculated with it.

Epidemic small-pox attacked 14,470 individuals during the year 1840, of whom, 1,390 were disfigured or left with broken down constitutions, and 1,668 died. Twenty-four cases occurred of a second attack of small-pox, and of this number three died.

Few of those who had been long since or recently vaccinated.

took small-pox. A few were affected with a varioloid eruption or with modified small-pox, generally of short duration however, and mild. Of 406 persons who had been previously vaccinated, and were attacked with this varioloid eruption, only six died, or more properly only four, as two died from other causes than this disease, giving the extremely small proportion of one death out of 101 who took the varioloid disease.

2,214 individuals were re-vaccinated, and of this number, 1,704 failed, 227 had imperfect vesicles, and 270 perfect vesicles of the usual appearance. Three of those who were re-vaccinated with success took the varioloid disease.

The following conclusions were adopted by the Academy:

1. Vaccination preserves from small-pox. This preservative power is not unlimited for all individuals, as a certain number remain still exposed to an eruption known by the name of the varioloid disease.

2. This eruption, though of the nature of small-pox, is in general mild, and free from danger. During the year 1840, of those affected with the varioloid disease there only died in the proportion of 1 in 101, whilst small-pox cut off 1 of every $8\frac{1}{2}$.

3. A first vaccination destroys the aptitude to take the vaccine disease a second time, in the same way as it does that of small-pox. There are, however, certain individuals in whom the aptitude to take the disease returns after a certain time. The same is true of individuals who have had small-pox, who will take vaccine disease in a regular manner; but it cannot be concluded from this that these individuals would have taken small-pox.

4. The most perfect vaccination cannot be held as guarantee that all, without exception, are perfectly defended from the chances of taking small-pox.

5. In general, small-pox attacks an individual only once during life. There are, however, individuals who are liable to a second attack, which may be as severe as the first.—*Bulletin of Med. Science, from Bulletin de l'Accademie de Medicine, April, 1842.*

Diseases of Childhood.—The diseases of childhood have of late years attracted peculiar attention in France. The immense hospitals of Paris afford an ample field for their investigation, and the large number of recent publications on the nature and treatment of these affections, bears testimony to the zeal with which it is cultivated. M. Valliex's *Clinique des Maladies des Enfants*, which appeared in 1838, was followed in the succeeding year by the *Traité Pratique des Maladies des Enfants* of M. Richard of Nancy. In the year 1841, a monthly journal for children's diseases was set on foot, and 1842 had scarcely commenced when the books whose titles are at the head of this article made their appearance, both thick and closely printed octavos, and one being only the first volume of a work which will probably extend to two more before its completion. M. Becquerel, the laborious *exinterne* of the Hôpital des Enfants Malades, has published the first number of a treatise on the diseases of children, which is to appear in parts, and a complete work on the subject by MM. Rilliet and Barthez, so favorably known by their essay on pneumonia in children, is in the press, and will be published before the close of the year.

Valuable as many of the observations are which these works contain, we yet cannot suppress a feeling of disappointment at the smallness of the results which have followed so much labour. Instead of confining themselves to the patient investigation of some one disease, these writers have taken a wider range, and have treated of all the affections incidental to childhood. They have presented us not with monographs, but with so-called complete theoretical and practical treatises, which abound in facts incompletely observed, and in conclusions drawn hastily from insufficient premises, and which lead us to a region of doubt and uncertainty. The brief period of an *internât*, no small part of which must be spent in learning to observe, is far too short to qualify any one for writing on all the diseases of children, and the opportunities of after-life are in most cases inadequate to supply this deficiency. Thus we find M. Berton publishing in 1842 a new edition of his *Traité des Maladies des Enfants*, which contains three hundred pages more than the former one; but this

addition consists of the opinions, worthless as well as valuable, of all who have written on the subject within the last seven years, not of the results of the author's greater experience and maturer judgment.—*Br. & For. Med. Rev.*

Medical Police in England.—The principles of medical police have been acted upon in England from a very early period; certainly 600 years ago. But, in fact, these principles may be traced in all societies, of men, however primitive; the adoption of them may be termed an instinct. The common law against nuisances contains the kernel of our medical police, the term nuisance meaning any thing by which the health or the personal safety, or the conveniences of the subject might be endangered. Thus it is contrary to law to divide a messuage in a town for poor people to inhabit, by which it will be more dangerous in time of infection. Mr. Chadwick says that the common law obligation upon all owners of property has, in general, been adhered to by the superior courts, "*Prohibetur ne quis faciet in suo quod nocere possit in alieno; et sic utere tuo ut alienum non lædas.*" The plain English of this is "do as you would be done by," a precept continually set at nought by the operation of the antagonist principle of selfishness—"every man for himself and God for all." Legislative enactments in great variety have been adopted to counteract this ever-operating desire to seek individual benefit at the cost of the public health and comfort. Such, however, has been the ignorance of all classes (not excepting the medical profession) of the leading principles of state medicine that these enactments have always been crude and insufficient, and generally useless. As medical science became more cultivated, hygienic knowledge was more diffused, and we find an infinity of local acts and municipal bye-laws providing for the supply of water and the sewerage of towns; the cleansing of streets; the discovery and destruction of unwholesome food and drink, &c.—Boards of health were established in Ireland, but have utterly failed in achieving any permanent good. The most important authority for removing nuisances was vested in the courts leet. Juries are empanelled at these courts and authorized to perambu-

late districts and judge of nuisances upon the view. They have been discontinued in many parts of the country since the new Poor Law came into operation, and it would be as well if they were discontinued altogether, as in places where they are still held, the “annoyance juries” are composed of petty tradesmen and mechanics, utterly ignorant, we need not say, of the aim and scope of their duties, and of the knowledge necessary to their proper discharge.—*Ibid.*

THE SYDENHAM SOCIETY. — [The following prospectus, which we transcribe at length, gives so clear an account of the nature and objects of the new Society, that we have scarcely any thing to add to commend it to the notice of our readers.—None but those who, like the editors of critical Journals, are called on to examine all publications that issue from the medical Press, can be fully aware of the extent to which ignorance of the medical literature of past times—even of that immediately preceding our own time—prevails among the members of our profession. It is lamentable to think to what an extent the weekly journals constitute the habitual reading of a large portion of medical men, than which nothing can be imagined less likely to advance sound knowledge, or improve good taste. We have some hope that the Works to be issued from the Sydenham Press, and which must, in some degree, compel the attention of the profession to them, may awaken a relish for a higher and healthier literature.—*Ibid.*]

Prospectus.—The Sydenham Society has been founded for the purpose of meeting certain acknowledged deficiencies in the diffusion of medical literature, which are not likely to be supplied by the efforts of individuals. It will carry this object into effect by distributing among its members—

1. Reprints of standard English medical works, which are rare and expensive.
2. Miscellaneous Selections from the ancient and from the earlier modern authors, reprinted or translated.
3. Digests of the most important matters contained in old and

voluminous authors, British and foreign, with occasional biographical and bibliographical notices.

4. Translations of the Greek and Latin medical authors, and of works in the Arabic and other Eastern languages, accompanied, when it is thought desirable, by the original text.

5. Translations of recent foreign works of merit.

6. Original works of great merit, which might be very valuable as books of reference, but which would not otherwise be published, from not being likely to have a remunerating sale,—such as classified Bibliographies, and alphabetical Indexes to periodical publications and other valuable voluminous works.

The Society will consist of an unlimited number of members.

The subscription constituting a member is one Guinea annually, for which he will be entitled to a copy of every work printed by the Society, during the time of his subscription.

The subscriptions are to be paid in advance ; and no member is responsible beyond the amount of his subscription.

All works published by the Society will be selected by the Council ; and, previous to publication, will be subjected to their supervision.

The Society will not commence its operations until the number of its members amounts to five hundred.

The works of the Society will be printed for members only ; on a uniform plan, and with a good legible type.

The Society will be under the direction of a Council of twenty-four members, elected at the annual general meeting from the subscribers at large ; and of this number eighteen only will be re-eligible for the following year.

The President and Vice-Presidents will also be elected annually.

As the expense of management will be very small, nearly the whole of the funds subscribed will be devoted to the publications ; and as the proportionate cost of producing books decreases as the number of copies increases, it is anticipated that, when the Society is fully organized, the annual supply of works to members will be considerable.

The great success that has attended other Societies, establish-

ed on similar principles, and with like objects,—as the CAMDEN, the PARKER, the PERCY, &c.,* leaves no room for doubt as to the eventual prosperity of the Sydenham Society. It would indeed be strange, if Medicine, which boasts of a literature more extensive than that of any other art or science, and of cultivators as numerous, zealous, and learned, as any other department of human knowledge, should fail in attaining an end which has been so speedily and so fully accomplished by the societies referred to, and by others embracing even less comprehensive objects.

The Gentlemen named below, as constituting the Provisional Council, have undertaken the organization of the Society, and will continue to act until its constitution and government are finally fixed at a general meeting of the members. They have great satisfaction in being able to lay before their medical brethren the names of the eminent individuals who have consented to act as Provisional President and Vice-Presidents, and who have promised their zealous co-operation in carrying into effect the important objects of the Society.

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* The present number of subscribers to the Parker Society for publishing theological works, exceeds 7000. The number of members in the Camden is limited to 1200, and that number has long been complete.

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ROBERT WILLIS, M.D.

ERASMUS WILSON, Esq.

Secretary to the Provisional Council—W. G. BURROUGHS, Esq.

Homœopathy and the late Lady Denbigh.—Unfortunately for herself the poor lady had great faith in homœopathy. Her husband, too, was equally credulous as to the theories of Hahnemann. Although in her confinement eighteen months ago, she nearly lost her life by homœopathic treatment, her belief in it continued unshaken; and on again becoming pregnant recourse was had, as before, to the infinitesimal system. This lady was of a very plethoric habit, and, according to the accepted practice in similar cases, should have been carefully watched by her medical attendant during the whole period of gestation, and such means adopted as were likely to prevent any undue determination to the head during or preceding labour. Thus might have been prevented apoplexy or convulsions. But such treatment is against the principles of Hahnemann and his disciples, and therefore could not have been followed by the homœopathic attendants on this unhappy lady. As the period of her expected confinement drew near she was seized with convulsions; and, as a matter of course, their fractional grains and their globules had no sort of power to check them. Some time was lost in these fruitless attempts, and we all know the great value of even an hour in such cases.—By accident a medical man of some eminence was in the house, and was requested to see the case; he pronounced the lady to be suffering under puerperal convulsions, requiring the most energetic measures, and the assistance of a skilful accoucheur, to

forward delivery. No, the homœopathic doctors spoke confidently, and the poor husband was not shaken in his faith of their skill. The infinitesimal remedies were alone used; the convulsions ran their course unchecked, and apoplectic coma followed!

These worthy gentlemen issued a bulletin when the patient was in this stage of the disease, and when she was, in all likelihood, past hope; when effusion must have commenced, and when no bleeding, no leeching, no purgative had been used.

“Friday, half-past nine, a. m., Lady —— had till nine o’clock last evening several very violent convulsive attacks. These have now yielded to the means employed, and there has been no return since two o’clock this morning. Her ladyship has, however, not yet recovered her senses.

“P. CURIE, L.C.

“HARRIS BUNSFORD, M.D.”

A note was written by one of the family at this juncture, speaking cheerfully of the opinion given in the bulletin. In this state of unconsciousness, and by the assistance, I understand, of the medical practitioner before alluded to, the patient gave birth to a child, and sank. The story is a melancholy one. Any tyro who had attended one course of midwifery lectures would have known every symptom in this case, and been able to determine on the necessary treatment. A story was circulated immediately after the event, that a fright occasioned the convulsions.—This caused a fear of the coroner. The rumour was then changed, and a post-mortem examination was made:—

Report.—Softening of the brain; a large tumour; and more water than usual in the ventricles.—Who examined the head? Dr. Hahnemann’s disciples! These facts need no further comment.—(*M. D., in the “Medical Gazette.”*)

* * Malibran died at Manchester in the hands of similar quacks. Those are expensive gentlemen who take lives and fees too.—The death of Lady Denbigh occurred in the district of the coroner for Westminster. But of what use are investigations before *attorneys* in such cases, where the question is one purely of a *medical* character?—*London Lancet*, Jan. 28, 1843,

Baldness and Gout.—"Hippocrates, the greatest of physicians and the founder of medical science, declares," says Seneca, "that women never become bald, and never suffer from the gout.—Such is no longer the case. They now have as bald heads as men, and as gouty feet. This is owing, not to any change in nature, but to a change in the habits of females. Being at present equal to men in profligacy of life, they are likewise equal to them in diseases."—*Epist.* 95. The statement of Hippocrates thus referred to, is found, in part, in the *Aphorisms*, 6, 29, but guarded with a qualification; "a woman is never attacked by the gout, except when her catamenia have failed." The exemption from baldness is attributed by Hippocrates and by Aristotle to eunuchs, and ascribed to women by Galen, who asserts that in his time they had ceased to enjoy it, and explains the change in the same manner as Seneca.

A Heathen Hospital.—[Mr. Allen, an American Missionary, thus notices what every one must regard as a most singular establishment in Bombay.]

"It has been said, that heathenism never furnished an hospital. There is at least one exception to the truth of this remark. There is one here, supported at an expense of 16,000 dollars annually. It was founded by a donation of 130,000 dollars, by a native merchant of the Jain sect—the sect which appears to approach nearer than any other to the primitive Hindooism, with which Pythagoras became acquainted at Babylon. Its doctrines strictly forbid the destruction of animal life, in any case whatever. The management of this hospital is wholly in heathen hands. and heathen liberality furnishes all its resources. In it are gratuitously supported from 50 to 100 old horses, which would otherwise be killed as past service; about 175 cows and oxen; 200 dogs, for whose destruction the authorities of Bombay offer a bounty twice-a-year; and a large number of cats, monkeys and other animals. Its charities are accessible to living beings of every species except the human race. Men, women, and children, wounded, sick and destitute, are allowed to die unaided within sight of its walls. Such is the character of the only hos-

pital, so far as is known, that heathenism ever built.”—*Hong Kong Gazette*.

Scurvy in the 16th Century.—[The following interesting account of the cause, symptoms, treatment, and prevention of scurvy is given by Sir Richard Hawkins, a gallant but unfortunate commander, who conducted an expedition, in 1593, to the South Sea, with a commission from Queen Elizabeth empowering him to attack the Spaniards in South America. It will be seen that the mode of preventing the disease which he recommends is very similar to the one which has been established by the results of more recent observation. The narrative of the voyage from which we copy is contained in *Purchas his Pilgrimes*, Vol. IV., Page 1373. Edition of 1625.]

“Being betwixt three and foure degrees of the Equinoctiall line, my company within a few daies began to fall sicke of a disease which sea-men are wont to call the scurvie: and which seemeth to be a kinde of dropsie, and raigneth most in this climate of any that I have heard or read of in the world; though in all seas it is wont to helpe and increase the miserie of man; it possesseth all those of which it taketh hold with a loathsome slothfulnesse, that even to eate they would be content to change with sleepe and rest, which is the most pernicious enemy in this sickness that is knowne. It bringeth with it a great desire to drinke, and causeth a generall swelling of all parts of the body, especially of the legges and gummes, and many times the teeth fall out of the jawes without paine. The signes to know this disease in the beginning are divers, by the swelling of the gummes, by denting of the flesh of the legges with a mans finger, the pit remaining without filling up in a good space: others show it with their lasinesse, others complaine of the cricke of the backe, &c. all which are, for the most part, certain tokens of infection. The cause is thought to be the stomacks feeblenesse, by change of aire in untemperate climates, of diet in salt meates, boiled also in salt water and corrupted sometimes; the want of exercise also, either in persons or elements, as calmes. And were it not for the moving of the sea by the force of windes, tydes, and currants,

it would corrupt all the world. The experience I saw in Anno 1590, lying with a fleete of her Magesties ships about the ilands of the Azores almost six moneths, the greatest part of the time we were becalmed ; with which all the sea became so replenished with severall sorts of gellyes and formes of serpents, adders, and snakes, as seemed wonderfull : some greene, some blacke, some yellow, some white, some of divers colours, and many of them had life, and some there were a yard and halfe and two yards long ; which had I not seene, I could hardly have beleaved. And hereof are witnesses all the companies of the shippes which were then present ; so that hardly a man could draw a bucket of water cleere of some corruption. In which voyage, towards the end thereof many of every ship (saving of the Nonpereli, which was under my charge, and had only one man sicke in all the voyage) fell sicke of this disease, and began to die apace, but that the speedie passage into our countrie was remedy to the crazed, and a preservative for those that were not touched.

The best prevention of this disease (in my judgement) is to keepe cleane the shippe, to besprinkle her ordinarily with vinegar, or to burne tarre, and some sweet savours, to feede upon as few salt meats in the hot country as may be, and especially to shun all kindes of salt fish, and to reserve them for the cold climates, and not to dresse any meate with salt water, nor to suffer the companie to wash their shirts nor cloathes in it, nor to sleepe in their cloathes when they are wet. For this cause it is necessarily required, that provision be made of apparell for the companie, that they may have wherewith to shift themselves. Being a common calamitie amongst the ordinary sort of mariners to spend their thrift on the shore, and to bring to sea no more cloathes than they have backes ; for the body of man is not refreshed with any thing more, than with shifting cleane cloathes ; a great preservative of health in hot countries. The second antidote is, to keepe the company occupied in some bodily exercise of worke, of agilitie, of pastimes, of dancing, of use of armes ; these helpe much to banish this infirmitie. Thirdly, in the morning at discharge of the watch, to give every man a bit of bread, and a draught of drinke, either beere, or wine mingled with water (at the least the

one half) or a quantitie mingled with beere, that the poores of the body may be full when the vapours of the sea ascend up.—The morning draught should bee ever of the best and choisest of that in the ship. Pure wine I hold to be more hurtfull than the other is profitable. In this, others will be of a contrary opinion, but I thinke partiall. If not, then leave I the remedies thereof to those physicions and surgeons who have experience. And I wish that some learned man would write of it, for it is the plague of the sea, and the spoyle of mariners; doubtlesse, it would bee a worke worthy of a worthy man, and most beneficiall for our countrie; for in twentie yeeres (since I have used the sea) I dare take upon me to give account of ten thousand men consumed with this disease.

That which I have seen most fruitfull for this sicknesse is soure oranges and lemmons, and a water which amongst others (for my particular provision) I carried to the sea, called Doctor Stevens water, of which, for that its vertue was not then well knowne unto me, I carried but little, and it took end quickly, but gave health to those that used it. The oyle of vitry is beneficiall for this disease; taking two drops of it, and mingled in a draught of water, with a little sugar. It taketh away the thirst, and helpeth to clense and comfort the stomacke. But the principall of all is the ayre of the land; for the sea is naturall for fishes, and the land for men. And the oftner a man can have his people to land, (not hindering his voyage) the better it is, and the profitablest course that he can take to refresh them.”

Cause of the Annual Catarrh of the People of St. Kilda.—“It will be readily supposed that I neglected no inquiry respecting the remarkable circumstances which are related both by Martin and Macaulay, and reported all over the Western Islands of Scotland, with regard to a cough, the natives catch whenever strangers arrive upon their island. During the whole time I remained among them, I endeavoured by every possible means to ascertain the truth or falsehood of this extraordinary tale. The minister, Mr. Macleod, in answer to the first question I put to him, assured me, in the most solemn manner, that the circumstance was

true. Both Mr. Maclean and myself examined and cross-examined, both his testimony and that of the natives themselves; and the result of our inquiry was, that a cold or cough was annually communicated to all the inhabitants of St. Kilda; not from any vessel that might chance to arrive, but from the taxman's boat alone, whose annual advent was not fixed to any stated period, but was a month sooner or a month later, according as the weather proved favourable or unpropitious. A vessel from Norway visited St. Kilda this year, before the arrival of the taxman, the crew of which mingled with the natives, but no cold or cough was communicated to them. The fact appeared now more marvellous than ever. That an effect so remarkable should be peculiar to the arrival of one particular boat, is hardly to be credited. Nevertheless, the fact is indisputable. The taxman comes, and all the island catch a cough; other vessels arrive, both before and after, and no such effect is produced. He had been gone only eight days when we arrived, and I saw several both young and old afflicted with this malady to such a degree that it had nearly proved fatal to some of them. I was at first perfectly confounded with the evidence of my own senses. I felt that in relating it at my return, the tale would either become established as a fact, no longer to be doubted, or subject me to an imputation of the weakest credulity. I prosecuted my inquiry to greater extent, and with renewed vigilance; at length the light began to break forth, and the mystery was disclosed. I hope I shall be able to explain the real nature of this cough, by relating the true cause of its origin.

The young man whom I mentioned at my arrival upon the island, and whose attentions never left me during the time I remained there, had been married but a few days. They postpone their marriages till the arrival of the steward, and he expressed a wish that I had been present upon the occasion. "Then," said he, "you would have seen the whole island dancing, and the whole island drunk." "And what do you find to get drunk with here?" "Whiskey! the steward always brings whiskey, and when he comes, we dance and sing merrily." "And do'nt you dance

during the rest of the year?" "Not so much; when the steward comes, we dance all night, and make a fine noise altogether."

I applied to Mr. Macleod for farther information upon this subject, and was told that this was the reason of their postponing their marriages. The arrival of the taxman, or as they call him, steward, is the jubilee of the year. He brings with him spirituous liquors, and a total change of diet. The return of this period is the only gleam of sunshine which cheers the long and gloomy night of their miseries. They hail his coming, they rejoice, they drink, they dance, their spirits are elevated, they become heated, they expose themselves to the humid influence of an atmosphere constantly impregnated with fogs; their mode of diet is totally changed, and the consequence is very natural, that out of twenty-two families the greater part of them are afflicted with a violent cold and cough.

I expressed my sentiments on this subject to their minister, but nothing could alter his opinion. He admitted the truth of what I have stated with regard to the arrival of the taxman; but remained bigotted to the old miraculous tale of the cough being taken from the smell of fresh air, which hangs upon the taxman's clothes. Allowing for a moment the truth of so absurd a supposition, the taxman, in that case, would not be the only person to communicate a smell of air, foreign to the olfactory nerves of the St. Kildians. The Norway vessel, which arrived before him, or our cutter which came after, would produce the same effect. I have no doubt whatever, in my own mind, respecting the real origin of the St. Kilda cough. Whether my readers will coincide in my opinion I know not; but, until I hear the circumstance otherwise rationally accounted for, I must attribute it to the alteration in manners and in diet, the intemperance and riot, which take place upon the arrival of the taxman. It is true, many of the children in the island were afflicted with the same malady; from which I conclude, that the mothers who imprudently, or rather ignorantly exposed themselves to the night air, heated by whiskey and dancing, exposed their children also. "*Journal of a Tour to the Western Isles, in 1797, by Dr. Edward Daniel Clarke.*"

[Quis munerare queat felicitis præmia, Galle,
Militiæ?—*Juvenal.*

We copy from the *Medical Examiner* of April, 1843, the following editorial article, partly for the benefit of young physicians who may be inclined to enter the medical staff of the naval service, and partly to express our feelings of reprobation of the evident injustice inflicted upon a highly respectable and useful division of our professional brethren. Those who can deliberately sanction the regulations here complained of, deserve to be destitute in their hour of need of the aid of the science which they have been willing to oppress and degrade.]

Medical Officers in the Navy.—It is not unfrequently asked, what is the mode of obtaining the appointment of assistant surgeon in the navy? but few inquire whether the situation of an assistant surgeon in the navy is really a desirable one. What is the nature of the services required at the hands of this class of officers? how are they cared for on board ships of war? and what is the position of assistant surgeons relatively to other officers in the navy? are questions rarely put by those who quit the University or College, eagerly desiring “to see the world,” and commence the career of life. And if they should prudently ask for information on these points, there are few, perhaps, who are competent to give it. It may be interesting to the profession generally to understand this subject; and it may be useful to those who may think of pursuing their professional career in the navy.

The usual manner of obtaining a commission as an assistant surgeon in the navy, is to address an application to the Secretary of the Navy, accompanied by respectable testimonials that the candidate “possesses the *moral* and *physical* qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties which will be required of him.” The rule of the Navy Department on this subject requires that applicants must be citizens of the United States—(it ought to be *natives*)—over 21, and not over 28 years of age.

The law provides that “no person shall receive the appointment of assistant surgeon in the navy of the United States, unless he shall have been examined and approved by a board of naval surgeons, who shall be designated for that purpose by the Secretary of the Navy.”

Boards of examination are appointed only at such times as the wants of the service render necessary. They usually consist of five experienced surgeons of the navy. The Secretary of the Navy selects from the applicants the number of individuals to be examined. To the persons thus selected “permissions” are given to present themselves to the Board of Examination, stating the

time and place of its meeting. By the instruction of the Navy Department, "the Board rigidly scrutinizes the pretensions of each candidate; taking into consideration his physical qualifications and moral habits, as well as his professional acquirements and general knowledge; and reports favourably upon no case admitting of a reasonable doubt, *as the health and lives of the officers, seamen and marines, are objects too important to be committed to ignorant or incompetent hands.* The Board reports the relative merit of the candidates, as shown by the examination; and those of whose qualifications the Board is satisfied, are appointed assistant surgeons as their services are required:" of course, those at the head of the list being first commissioned.

"Candidates of whom the Board makes an unfavourable report are allowed a second examination, at a future session, if they desire it; when, if they again fail, their names are dropped from the list of applicants.

"No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment."

In its decisions the Board is influenced by considering of what school the candidate is a graduate, or whether he has graduated at all: provided he possesses the requisite qualifications, it matters very little where, or by what means, (provided always they are honest,) he has obtained his knowledge. Usually each member of the Board is especially responsible for one or more branches, but is not confined in his examination to these branches, because he has to give his vote as to whether the candidate is qualified, in all respects, to discharge the duties of an assistant surgeon in the navy, and not as to whether he is, or is not, acquainted with a particular branch of medical science. Each candidate writes a thesis, the subject of which is assigned by the Board. He is given a single sheet of paper, and performs his task in an adjoining apartment. This is a close test of primary education, of readiness, and of the character of the candidate's professional mind; and affords the same indication of ability as an off-hand letter upon a professional subject. That part of the examination which relates to bandaging and the treatment of fractures is generally practical; the candidate being required to exhibit his knowledge of the subject by applying dressings to a mannikin or casts, which are provided for the purpose. In short, the chief object of the examination is to ascertain, if possible, whether the candidate is likely to be an active and efficient practitioner of medicine and surgery.

Having passed this ordeal, the candidate, in the course of time, receives from the President of the United States, "by and with

the advice and consent of the Senate," a commission, the tenor of which is precisely like that of every commission officer of the navy.

For the services of a person thus qualified, the government pays annually \$950, when employed on shore; when employed at sea, \$1023; and when on leave of absence or waiting orders, \$650. These sums include "rations," and perquisites of every kind and description, except an allowance of ten cents per mile when travelling in the United States by order of the government. Like every other officer in the navy, whether on duty or not, the assistant surgeon pays an annual tax of \$2.40 a year to the "Navy Hospital Fund." These sums only are received; and out of them the medical officer is, of course, obliged to subsist himself, provide his uniforms and clothing, and, should he be married, support his family.

Taking the ordinary run of service for five years, sea and shore duty, and a short leave of absence, the average annual pay of an assistant surgeon will be about \$930, but not more.

The moment a physician accepts the commission of an assistant surgeon he ceases to be a free citizen, and becomes subject to an aristocratic-military government, in which the position or rank of every individual under its power is defined and established by rule or usage, and he is every hour made to feel that he has many superiors in the new community of his choice.

By those who are unaccustomed to the influence of defined rank, and by those who defer only to individual attributes, the value of rank will not be readily appreciated, because they are not aware that rank, in the naval community, controls association, and points out, precisely, where the foot may, or may not rest, on board of public vessels. Rank is the foundation of power, of personal rights and privileges, and, consequently, of discipline in all military governments.

What is the rank of assistant surgeons in the navy? They have no rank whatever. They are in the anomalous situation of holding a military commission, which secures them no personal rights or privileges; and they are preceded by all warrant officers, except boatswains, gunners, carpenters and sailmakers, and by all teachers of navigation, and steam engineers. Assistant surgeons in the army rank correlatively as masters in the navy, or first lieutenants in the army, and, after five years' service, as captains in the army, or lieutenants in the navy.

In a system of "Rules and Regulations for the Navy," recently submitted to Congress for approval, it is proposed that assistant surgeons shall rank with passed-midshipmen, (a grade of sea-officers corresponding with second lieutenants or ensigns in the army,) but stipulates that, on all occasions, "the sea-officers shall take precedence" of them.

And, it may be asked, how are assistant surgeons affected by not having rank?

Follow the assistant surgeon on board ship, and we shall soon find how very uncomfortable he is made by not possessing a proper and defined rank. He is accommodated in the steerage with the midshipmen, that is, boys from fourteen years of age and upwards; he sleeps in a cot, (a sort of hammock stretched on a frame,) hung up at night in an apartment of perhaps twenty feet square, with eight or ten hammocks, one or more of which he must press to one side, perhaps, before he can reach his bed.—His clothes and books are stowed in a “locker,” which, on shore, would be a narrow closet; and, when not professionally employed, if he possess the power of abstraction, he may read and study as much as he pleases, amidst the ordinary Babel-sounds of a crowded steerage. If he serve in a frigate he is somewhat better off, because there he will have a square hole, called a state-room, in the cockpit, which, being below the water line, is totally dark, except when artificially lighted; but when it is remembered that the cockpit is a sort of common vestibule to the store-rooms of the purser, master, marine officer and captain, from which emanate smells of various dietetics kept for the captain’s table, it may be understood that the accommodation is even here not of the most eligible kind. On board of ships-of-the-line his condition is not always improved.

The quarter deck in vessels of war, as well as in others, is the sacred part of the ship. A middle longitudinal line divides it into the right, or *starboard side*, and left, or *larboard side*. The starboard side is the side of honour or distinction, and is the privileged promenade of all commission officers, except assistant surgeons, who are permitted to use the larboard side, which is the ground of the midshipmen. In frigates, assistant surgeons are prohibited from using the same ladder or stair to ascend from the lower to the upper deck; there being one ladder provided for the use of the ward-room officers (lieutenants, surgeon, purser, &c.) and captain, and another common to all other officers.

When ward room officers leave the vessel or return to it, they do so by the starboard side, and their ingress or egress is always accompanied by the ceremony of “two side boys and piping the side.” And at night they answer to the sentry’s hail, as they approach the ship, “ay! ay!” and are received by two lanterns, to enable them better to see their way into the ship. But assistant surgeons and warrant officers, except the master, leave and return to the ship by the larboard side, and without the ceremony above mentioned; and when they approach the vessel at night, their answer to the sentry’s hail is “no! no!” which has been facetiously construed, “nobody, nobody” and they are per-

mitted to get on board in the dark in the best way they can.—The starboard and larboard gangways, or points of entrance and exit, may be compared to the front and back entrance of a mansion; the starboard side or front being for the admission of persons of consideration, and the larboard for the admission of individuals of an inferior order, such as servants and others.

Officially, assistant surgeons are held responsible for the execution of the orders given by the surgeon; and they perform the minor operations, as bleeding, leeching, tooth drawing, cupping, and, at least, superintend the mixing and exhibition of medicine in all forms; attend to the cleanliness of the store-room, dispensary and sickbay; and in the absence of the surgeon, the senior assistant performs all the duties that devolve upon him. If the ship has a competent surgeon's steward, the details are performed by him, under the general superintendence of the assistant.

At the end of five years the assistant is eligible to examination for promotion, and again appears before the Board. The second examination differs somewhat from the first, and the candidate is expected to exhibit a knowledge of the opinions of medical and surgical writers, and show that he has obtained information on nautical hygiene and nautical medicine. If he be found qualified for promotion, his pay is increased. When on leave of absence, his annual pay is \$850; when employed on shore, \$1150; and at sea, \$1273; but neither his condition afloat, nor his duties, are changed in any respect. As a passed assistant surgeon he will probably remain four years before he receives a surgeon's commission.

For the first five years after promotion his annual pay, when on leave of absence, is \$1000; when employed on shore, \$1250; and when at sea, \$1406. But his condition afloat is improved, for he enjoys the personal comforts of ward-room officers, and the same observances of etiquette, to a very considerable extent.—Yet he has no rank; and even if he has been a surgeon a quarter of a century, he must give precedence to all lieutenants, although their commissions may be no more than a day old, as well as to the purser, be he ever so young in the service.

If a surgeon of twenty years standing—that is, after he has been twenty-nine years in the navy, including the time he serves as assistant and passed assistant surgeon—go to sea as surgeon of the fleet, the only improvement in his circumstances is, that his annual pay is \$2773, for the time he is so employed. If, at the end of the cruise, he is put on leave of absence, he receives \$1800 a year; and if employed on shore, \$2250; or should he be so fortunate as to receive the appointment of Chief of the Bureau of Medicine and Surgery, he can reside at Washington, and receive \$2500 a year while he is working very hard.

Supposing, then, that an assistant surgeon receive a commission when he is twenty-one years of age, he must be fifty before he obtains the very moderate salary of \$2250, while in charge of a hospital or other shore station.

Is such a sum, gained under such circumstances, worthy the laudable ambition of a well educated physician or surgeon? Is it a fair remuneration for the services rendered? Will well educated physicians be contented, and serve under such circumstances, unless their relative position in the navy be improved? It must be constantly borne in mind, too, that medical officers share equally with others the discomforts of sea-life, and are liable to the same wear and tear of constitution and privations entailed by absence from country and home consequent upon it, with others.

May we now ask whether the profession does not open a brighter prospect, under other circumstances than the navy affords, for well educated physicians and surgeons? If it does not, why do young men enter it? The government has more than once declared that it is "well aware of the great importance to the navy of a medical corps possessing high professional qualifications," and that it feels "great gratification in believing that, in this respect, no other service surpasses, if it equals, our own." Yet it takes no means to render the condition of medical officers in the navy more tolerable; but permits them to suffer unkindness and degradation from that class of officers which habitually arrogates to itself all power and all privilege of every kind.

Commanding officers, heretofore, have even possessed the power, which they have frequently exerted, of controlling the supply of medicines for the naval service, both as to kind and quantity. And not very long since a medical officer was actually cashiered by a court martial, because he differed with his commanding officer as to the necessity of having a new pestle and mortar in his dispensary—the circumstance being converted into an official charge of disrespect and insubordination.

At the late session of Congress a system of rules and regulations for the government of the navy, drawn up by a captain, a commander, a lieutenant and a purser, (but no surgeon,) under instructions from the Navy Department, was submitted for approval. In his letter accompanying these Rules and Regulations to Congress, the Secretary of the Navy says:

"As officers of acknowledged merit in the different grades of the service were engaged in this duty, (devising rules and regulations,) the fact that the rules and regulations now presented are approved by *all* of them, affords a strong presumption that they are right."

Notwithstanding this, this system of rules &c. provides that commanding officers shall control the supply of medicines, inspect

the surgeon's journal, and requires assistant surgeons "to inspect and report, daily, to the executive officer of the ship, the state of the galley," that is, the cooking utensils of the ship's cook!

Such incongruous provisions in a code of laws proposed for approval, would afford to most citizens "a strong presumption that they are" wrong—no matter what might be the reputed intelligence and merit of the persons who devised them.

If space were permitted to contrast the situation of medical officers in the navy with that of pursers and others, as regards pay, or with the army, the case would not be improved.

Necrology.

Mors autem vellens, vivite, ait, venio.

VIRGIL. *Copa.*

Died, in the city of Baltimore, April 25th, 1843, in the 23d year of his age Dr. N. T. H. Moore, Assistant Surgeon U. S. Navy. Dr. Moore was a graduate of the University of Maryland and entered the Naval service in full health, in 1840, and sailed in that year from the U. S. as Assistant Surgeon of the unfortunate sloop-of-war Concord, in November, 1842, in which he was wrecked upon the Coast of Africa. Under the harassings of a pulmonary affection, undoubtedly favoured in its progress by the privations and exposure of shipwreck, his life was just sufficiently prolonged to enable him to reach home, and to terminate in the midst of his family the career of one who promised to be an able and useful officer.

On the 12th of April, 1843, on board the steamer Gen. Morgan, on her way from Vicksburg up the Mississippi, Dr. William D. Ringrose, of Baltimore, aged about 25 years.

Near Clinton, Louisiana, on the 8th of February last, in the 30th year of his age, Dr. John W. Stone, son of the late Bishop Stone, of the Protestant Episcopal Church of Maryland.

Suddenly on the 4th of May, Dr. William Cronmiller of Baltimore, aged 41 years.

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